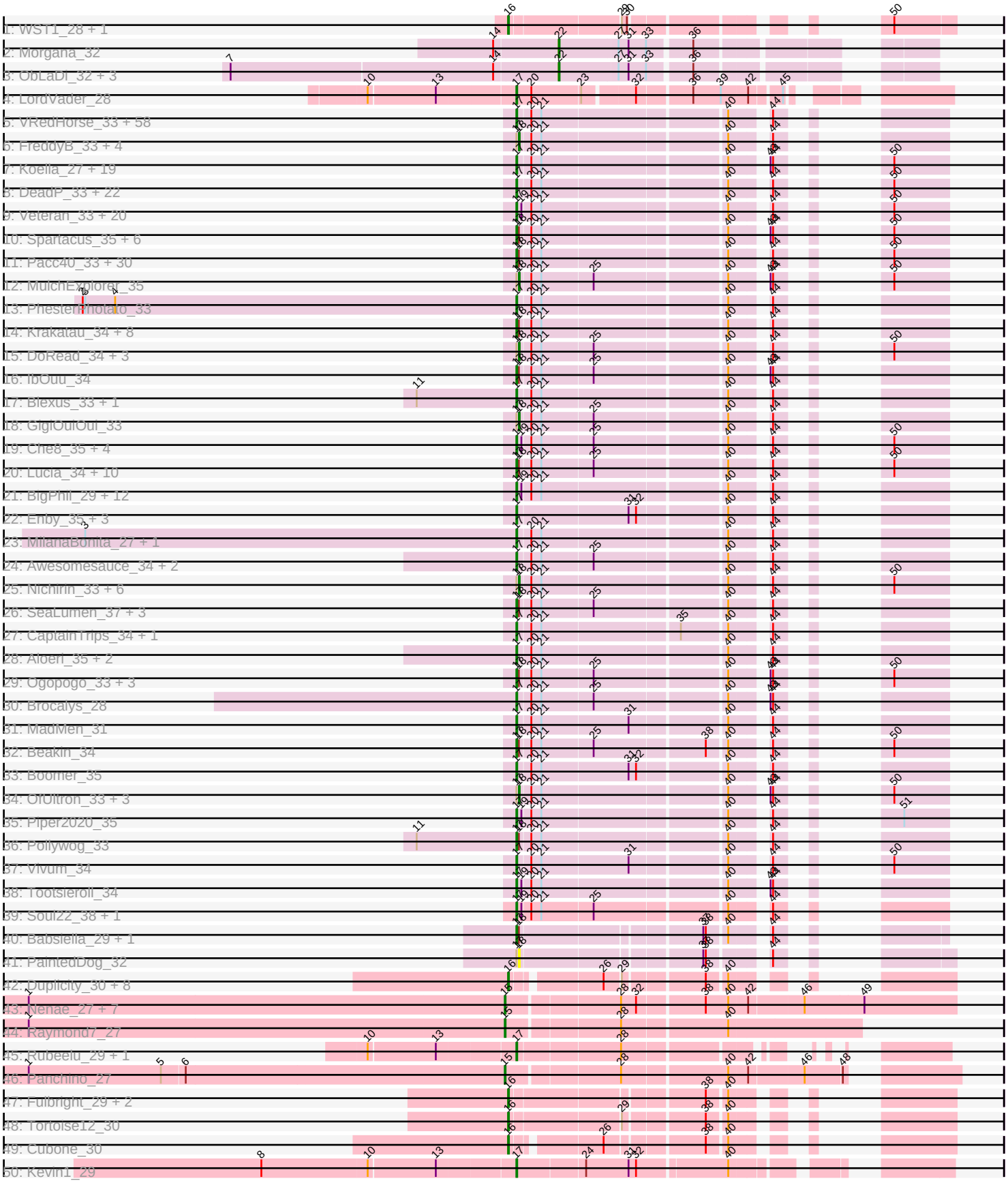
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1: WST1_28 + 1
2: Morgana_32
3: ObLaDi_32 + 3
4: LordVader_28
5: VRedHorse_33 + 58
6: FreddyB_33 + 4
7: Koella_27 + 19
8: DeadP_33 + 22
9: Veteran_33 + 20
10: Spartacus_35 + 6
11: Pacc40_33 + 30
12: MulchExplorer_35
13: PhesterPhotato_33
14: Krakatau_34 + 8
15: DoRead_34 + 3
16: IbOuu_34
17: Blexus_33 + 1
18: GigiOuiOui_33
19: Che8_35 + 4
20: Lucia_34 + 10
21: BigPhil_29 + 12
22: Enby_35 + 3
23: MilanaBonita_27 + 1
24: Awesomesauce_34 + 2
25: Nichirin_33 + 6
26: SeaLumen_37 + 3
27: CaptainThips_34 + 1
28: Aiden_35 + 2
29: Ogopogo_33 + 3
30: Brocalys_28
31: MadMen_31
32: Beakin_34
33: Boomer_35
34: OfOltron_33 + 3
35: Piper2020_35
36: Pollywog_33
37: Vivum_34
38: Tootsieroll_34
39: Soul22_38 + 1
40: Babsiella_29 + 1
41: PaintedDog_32
42: Duplicity_30 + 8
43: Nenae_27 + 7
44: Raymond7_27
45: Rubeelu_29 + 1
46: Panchino_27
47: Fulbright_29 + 2
48: Tortoise12_30
49: Cubone_30
50: Kevin1_29

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51: EGUnicorn_30
52: Willsammy_28
53: Tortellini_28
54: Xavia_29 + 3
55: TPA4_34
56: GMA4_24

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 347170 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347170 has 304 members, 23 are drafts.

Phages represented in each track:
• Track 1 : WST1_28, Purky_28
• Track 2 : Morgana_32
• Track 3 : ObLaDi_32, ModicumRichard_32, Cafasso_32, Aleemily_31
• Track 4 : LordVader_28
• Track 5 : VRedHorse_33, KristaRAM_34, Corium_33, Cornie_33, Bobi_35, Donkeykong_33, Hegedechwinu_34, OwlsT2W_34, Phanphagia_30, Fruitloop_32, LunaBlu_36, Renaud18_33, Blarby_42, Filuzino_33, MilleniumForce_34, Brookers_31, Batiatus_33, Emma_35, Hlubikazi_34, Doomslug_37, NewHope4_37, MinionDave_36, Firehouse51_34, MulchSalad_30, Juice456_35, Whatsapiecost_34, Brushbloom_34, Coco12_33, Plumbus_35, Tweety_33, Galactic_35, Strokeseat_34, Kenuha5_30, Mova_34, Jant_34, SilverChicken_41, Latretium_34, Mandlovu_34, Gandalph_34, Moonbeam_34, Beanstalk_35, DLane_33, KingJulian_33, PopTart_33, Violac_34, Medindi_34, Byougenkin_33, JalFarm20_36, Melissauren88_33, Flathead_33, SuperGrey_34, Phalconet_33, Shauna1_30, Ms6_27, Ardmore_32, Wachhund_33, SassyB_33, PatoPoderoso_33, Leozinho_35
• Track 6 : FreddyB_33, Cheesepuff_36, LittleShirley_36, Peridot_36, Fastidio_35
• Track 7 : Koella_27, LastJedi_27, Martik_33, SwagPigglett_33, Zizzle_33, Maravista_33, NormanBulbieJr_33, Cabrinians_33, Nivrat_33, Jennelsea_27, ShowerHandel_33, Yorick_33, Priscilla_33, Burwell21_33, LilMoolah_33, ShiLan_33, Jarcob_33, Pippy_27, Clifton_27, Lizziana_33
• Track 8 : DeadP_33, Dante_33, Doug_34, KingMidas_35, Empress_34, PHappiness_33, Ruby_35, IMpilo_32, Taj_33, Wee_34, BlueCrab_33, OldBen_33, Whouxphf_34, Starcevich_37, Deb65_33, Geralt_33, Girr_35, Eradicator_33, Nimbo_33, Bubbles123_35, Stap_34, MisterCuddles_35, Aubs_34
• Track 9 : Veteran_33, Daenerys_33, Emmaloid_35, Alexphander_36, Dorothy_33, DaWorst_35, Inventum_33, Scottish_34, Sassafras_34, Polka14_34, Slim_35, SiSi_33, JoeyJr_33, Hamulus_34, Spikelee_35, Phasih_34, GUmbie_33, Frankie_37, DaddyRickover_33, RedBird_33, BuzzLyseyear_36
• Track 10 : Spartacus_35, WillSterrel_35, Jinglebell_32, Ochi17_31, Llama_33, Modragons_33, IrishSherpFalk_35
• Track 11 : Pacc40_33, Eish_33, Spoonbill_33, Clank_31, Florinda_33, Gorge_33, EmiMonkey_34, Royals2015_33, Rockne_33, Phatniss_34, OlympiaSaint_33, PMC_33, Seagreen_34, ShroomBoi_30, DRBy19_33, Mattes_33, James_33, Philus_33, UncleRicky_36, Mutaforma13_33, Kersh_32, Quico_34, Chuckly_33, Sparkdehlily_33, Saal_33, Girafales_34, Drago_34, Karhdo_33, Radiance_33, TDanisky_33, Llij_33
• Track 12 : MulchExplorer_35

• Track 13 : PhesterPhotato_33
• Track 14 : Krakatau_34, Rialto_37, Estave1_31, Mantra_33, Nitzel_34, DillTech15_33, DotProduct_33, Totinger_34, XFactor_33
• Track 15 : DoRead_34, Ramsey_36, Chevrolet_34, Tchotchke_33
• Track 16 : IbOuu_34
• Track 17 : Blexus_33, BodEinwohner17_33
• Track 18 : GigiOuiOui_33
• Track 19 : Che8_35, Job42_37, Okabe_34, Minnie_35, DosHalletts_35
• Track 20 : Lucia_34, Ovechkin_34, RitaG_34, Hades_34, Fancypants_33, DirtMcgirt_34, Mahavrat_33, Harley_33, Mozy_35, ArcusAngelus_33, Ibhubesi_33
• Track 21 : BigPhil_29, Bipolar_30, Sandalphon_34, Cerasum_29, StAnnes_32, Rita_34, Doomphist_33, Sarma624_29, Poenanya_33, Velveteen_29, RockyHorror_34, Sabbb_34, Zerg_33
• Track 22 : Enby_35, Lorde_35, EleanorGeorge_34, SG4_34
• Track 23 : MilanaBonita_27, Akhila_27
• Track 24 : Awesomesauce_34, TootsiePop_34, Misha28_34
• Track 25 : Nichirin_33, Grimmer_35, Madiba_31, PhlipPhlop_34, Crumble_27, Juniper1_33, Leperchaun_33
• Track 26 : SeaLumen_37, Enzomatic_38, Polo2Bam_38, Kingsley_32
• Track 27 : CaptainTrips_34, Guppsters_35
• Track 28 : Aloeri_35, DocMcStuffins_35, ChickenDinner_35
• Track 29 : Ogopogo_33, QuickMath_34, Kimberlium_35, Cornucopia_34
• Track 30 : Brocalys_28
• Track 31 : MadMen_31
• Track 32 : Beakin_34
• Track 33 : Boomer_35
• Track 34 : OfUltron_33, Seabastian_33, Oksu_34, AlpineSix_34
• Track 35 : Piper2020_35
• Track 36 : Pollywog_33
• Track 37 : Vivum_34
• Track 38 : Tootsieroll_34
• Track 39 : Soul22_38, Marker_34
• Track 40 : Babsiella_29, HC_30
• Track 41 : PaintedDog_32
• Track 42 : Duplicity_30, Aggie_30, Silvy_30, Charlie_30, Journey_30, Xeno_29, SkinnyPete_27, Scitech_27, Bosection6_30
• Track 43 : Nenae_27, Hanako_27, PhancyPhin_27, Spinach_27, ShrimpFriedEgg_27, BabeRuth_27, Redi_27, Purgamenstris_27
• Track 44 : Raymond7_27
• Track 45 : Rubeelu_29, Butters_29
• Track 46 : Panchino_27
• Track 47 : Fulbright_29, Tapioca_30, Philonius_30
• Track 48 : Tortoise12_30
• Track 49 : Cubone_30
• Track 50 : Kevin1_29
• Track 51 : EGUnicorn_30
• Track 52 : Willsammy_28
• Track 53 : Tortellini_28
• Track 54 : Xavia_29, Phrann_28, Impisi_29, Bluvara_30
• Track 55 : TPA4_34
• Track 56 : GMA4_24

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 17, it was called in 227 of the 281 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Akhila_27, Alexphander_36, Aloeri_35, ArcusAngelus_33, Ardmore_32, Aubs_34, Awesomesauce_34, Babsiella_29, Batiatus_33, Beakin_34, Beanstalk_35, BigPhil_29, Bipolar_30, Blarby_42, Blexus_33, BlueCrab_33, Bluvara_30, Bobi_35, BodEinwohner17_33, Boomer_35, Brocalys_28, Brookers_31, Brushbloom_34, Bubbles123_35, Burwell21_33, Butters_29, BuzzLyseyear_36, Byougenkin_33, Cabrinians_33, CaptainTrips_34, Cerasum_29, Che8_35, ChickenDinner_35, Chuckly_33, Clank_31, Clifton_27, Coco12_33, Corium_33, Cornie_33, Cornucopia_34, DLane_33, DRBy19_33, DaWorst_35, DaddyRickover_33, Daenerys_33, Dante_33, DeadP_33, Deb65_33, DillTech15_33, DirtMcgirt_34, DocMcStuffins_35, Donkeykong_33, Doomphist_33, Doomslug_37, Dorothy_33, DosHalletts_35, DotProduct_33, Doug_34, Drago_34, Eish_33, EleanorGeorge_34, EmiMonkey_34, Emma_35, Emmaloid_35, Empress_34, Enby_35, Enzomatic_38, Eradicator_33, Estave1_31, Fancypants_33, Filuzino_33, Firehouse51_34, Flathead_33, Florinda_33, Frankie_37, Fruitloop_32, GMA4_24, GUmbie_33, Galactic_35, Gandalph_34, Geralt_33, Girafales_34, Girr_35, Gorge_33, Guppsters_35, HC_30, Hades_34, Hamulus_34, Harley_33, Hegedechwinu_34, Hlubikazi_34, IMpilo_32, IbOuu_34, Ibhubesi_33, Impisi_29, Inventum_33, IrishSherpFalk_35, JalFarm20_36, James_33, Jant_34, Jarcob_33, Jennelsea_27, Jinglebell_32, Job42_37, JoeyJr_33, Juice456_35, Karhdo_33, Kenuha5_30, Kersh_32, Kevin1_29, Kimberlium_35, KingJulian_33, KingMidas_35, Kingsley_32, Koella_27, Krakatau_34, KristaRAM_34, LastJedi_27, Latretium_34, Leozinho_35, LilMoolah_33, Lizziana_33, Llama_33, Llij_33, LordVader_28, Lorde_35, Lucia_34, LunaBlu_36, MadMen_31, Mahavrat_33, Mandlovu_34, Mantra_33, Maravista_33, Marker_34, Martik_33, Mattes_33, Medindi_34, Melissauren88_33, MilanaBonita_27, MilleniumForce_34, MinionDave_36, Minnie_35, Misha28_34, MisterCuddles_35, Modragons_33, Moonbeam_34, Mova_34, Mozy_35, Ms6_27, MulchSalad_30, Mutaforma13_33, NewHope4_37, Nimbo_33, Nitzel_34, Nivrat_33, NormanBulbieJr_33, Ochi17_31, Ogopogo_33, Okabe_34, OldBen_33, OlympiaSaint_33, Ovechkin_34, OwlsT2W_34, PHappiness_33, PMC_33, Pacc40_33, PatoPoderoso_33, Phalconet_33, Phanphagia_30, Phasih_34, Phatniss_34, PhesterPhotato_33, Philus_33, Phrann_28, Piper2020_35, Pippy_27, Plumbus_35, Poenanya_33, Polka14_34, Pollywog_33, Polo2Bam_38, PopTart_33, Priscilla_33, QuickMath_34, Quico_34, Radiance_33, RedBird_33, Renaud18_33, Rialto_37, RitaG_34, Rita_34, Rockne_33, RockyHorror_34, Royals2015_33, Rubeelu_29, Ruby_35, SG4_34, Saal_33, Sabbb_34, Sandalphon_34, Sarma624_29, Sassafras_34, SassyB_33, Scottish_34, SeaLumen_37, Seagreen_34, Shauna1_30, ShiLan_33, ShowerHandel_33, ShroomBoi_30, SiSi_33, SilverChicken_41, Slim_35, Soul22_38, Sparkdehlily_33, Spartacus_35, Spikelee_35, Spoonbill_33, StAnnes_32, Stap_34, Starcevich_37, Strokeseat_34, SuperGrey_34, SwagPigglett_33, TDanisky_33, TPA4_34, Taj_33, TootsiePop_34, Tootsieroll_34, Totinger_34, Tweety_33, UncleRicky_36, VRedHorse_33, Velveteen_29, Veteran_33, Violac_34, Vivum_34, Wachhund_33, Wee_34, Whatsapiecost_34, Whouxphf_34, WillSterrel_35, XFactor_33, Xavia_29, Yorick_33, Zerg_33, Zizzle_33,

Genes that have the "Most Annotated" start but do not call it:

• AlpineSix_34, Cheesepuff_36, Chevrolet_34, Crumble_27, DoRead_34, Fastidio_35, FreddyB_33, GigiOuiOui_33, Grimmer_35, Juniper1_33, Leperchaun_33, LittleShirley_36, Madiba_31, MulchExplorer_35, Nichirin_33, OfUltron_33, Oksu_34, PaintedDog_32, Peridot_36, PhlipPhlop_34, Ramsey_36, Seabastian_33, Tchotchke_33,

Genes that do not have the "Most Annotated" start:
• Aggie_30, Aleemily_31, BabeRuth_27, Bosection6_30, Cafasso_32, Charlie_30, Cubone_30, Duplicity_30, EGUnicorn_30, Fulbright_29, Hanako_27, Journey_30, ModicumRichard_32, Morgana_32, Nenae_27, ObLaDi_32, Panchino_27, PhancyPhin_27, Philonius_30, Purgamenstris_27, Purky_28, Raymond7_27, Redi_27, Scitech_27, ShrimpFriedEgg_27, Silvy_30, SkinnyPete_27, Spinach_27, Tapioca_30, Tortellini_28, Tortoise12_30, WST1_28, Willsammy_28, Xeno_29,

Summary by start number:

Start 15:
• Found in 12 of 304 (3.9%) of genes in pham
• Manual Annotations of this start: 12 of 281
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BabeRuth_27 (N), Hanako_27 (N), Nenae_27 (N), Panchino_27 (N), PhancyPhin_27 (N), Purgamenstris_27 (N), Raymond7_27 (N), Redi_27 (N), ShrimpFriedEgg_27 (N), Spinach_27 (N), Tortellini_28 (P2), Willsammy_28 (P1),

Start 16:
• Found in 17 of 304 (5.6%) of genes in pham
• Manual Annotations of this start: 15 of 281
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aggie_30 (N), Bosection6_30 (N), Charlie_30 (N), Cubone_30 (N), Duplicity_30 (N), EGUnicorn_30 (N), Fulbright_29 (N), Journey_30 (N), Philonius_30 (N), Purky_28 (P6), Scitech_27 (N), Silvy_30 (N), SkinnyPete_27 (N), Tapioca_30 (N), Tortoise12_30 (N), WST1_28 (AJ), Xeno_29 (N),

Start 17:
• Found in 270 of 304 (88.8%) of genes in pham
• Manual Annotations of this start: 227 of 281
• Called 91.5% of time when present
• Phage (with cluster) where this start called: Akhila_27 (F1), Alexphander_36 (F1), Aloeri_35 (F1), ArcusAngelus_33 (F1), Ardmore_32 (F1), Aubs_34 (F1), Awesomesauce_34 (F1), Babsiella_29 (I1), Batiatus_33 (F1), Beakin_34 (F1), Beanstalk_35 (F1), BigPhil_29 (F1), Bipolar_30 (F1), Blarby_42 (F), Blexus_33 (F1), BlueCrab_33 (F1), Bluvara_30 (I3), Bobi_35 (F1), BodEinwohner17_33 (F1), Boomer_35 (F1), Brocalys_28 (F1), Brookers_31 (F1), Brushbloom_34 (F1), Bubbles123_35 (F1), Burwell21_33 (F1), Butters_29 (N), BuzzLyseyear_36 (F1), Byougenkin_33 (F1), Cabrinians_33 (F1), CaptainTrips_34 (F1), Cerasum_29 (F1), Che8_35 (F1), ChickenDinner_35 (F1), Chuckly_33 (F1), Clank_31 (F), Clifton_27 (F1), Coco12_33 (F1), Corium_33 (F1), Cornie_33 (F5), Cornucopia_34 (F1), DLane_33 (F1), DRBy19_33 (F1), DaWorst_35 (F1), DaddyRickover_33 (F1), Daenerys_33 (F1), Dante_33 (F1), DeadP_33 (F1), Deb65_33 (F1), DillTech15_33 (F1), DirtMcgirt_34 (F1), DocMcStuffins_35 (F1), Donkeykong_33 (F1), Doomphist_33 (F1), Doomslug_37 (F), Dorothy_33 (F1), DosHalletts_35 (F1), DotProduct_33 (F1), Doug_34 (F1), Drago_34 (F1), Eish_33 (F1), EleanorGeorge_34

(F1), EmiMonkey_34 (F1), Emma_35 (F1), Emmaloid_35 (F1), Empress_34 (F1), Enby_35 (F1), Enzomatic_38 (F1), Eradicator_33 (F1), Estave1_31 (F1), Fancypants_33 (F1), Filuzino_33 (F1), Firehouse51_34 (F1), Flathead_33 (F1), Florinda_33 (F1), Frankie_37 (F1), Fruitloop_32 (F1), GMA4_24 (singleton), GUmbie_33 (F1), Galactic_35 (F1), Gandalph_34 (F1), Geralt_33 (F1), Girafales_34 (F1), Girr_35 (F1), Gorge_33 (F1), Guppsters_35 (F1), HC_30 (I1), Hades_34 (F1), Hamulus_34 (F1), Harley_33 (F1), Hegedechwinu_34 (F1), Hlubikazi_34 (F1), IMpilo_32 (F1), IbOuu_34 (F1), Ibhubesi_33 (F1), Impisi_29 (N), Inventum_33 (F1), IrishSherpFalk_35 (F1), JalFarm20_36 (F1), James_33 (F1), Jant_34 (F1), Jarcob_33 (F1), Jennelsea_27 (F1), Jinglebell_32 (F1), Job42_37 (F1), JoeyJr_33 (F1), Juice456_35 (F1), Karhdo_33 (F1), Kenuha5_30 (F1), Kersh_32 (F1), Kevin1_29 (N), Kimberlium_35 (F1), KingJulian_33 (F1), KingMidas_35 (F1), Kingsley_32 (F1), Koella_27 (F1), Krakatau_34 (F1), KristaRAM_34 (F1), LastJedi_27 (F1), Latretium_34 (F1), Leozinho_35 (F1), LilMoolah_33 (F1), Lizziana_33 (F1), Llama_33 (F1), Llij_33 (F1), LordVader_28 (F), Lorde_35 (F1), Lucia_34 (F1), LunaBlu_36 (F1), MadMen_31 (F1), Mahavrat_33 (F1), Mandlovu_34 (F1), Mantra_33 (F1), Maravista_33 (F1), Marker_34 (F1), Martik_33 (F1), Mattes_33 (F1), Medindi_34 (F1), Melissauren88_33 (F1), MilanaBonita_27 (F1), MilleniumForce_34 (F1), MinionDave_36 (F1), Minnie_35 (F1), Misha28_34 (F1), MisterCuddles_35 (F1), Modragons_33 (F1), Moonbeam_34 (F1), Mova_34 (F1), Mozy_35 (F1), Ms6_27 (F1), MulchSalad_30 (F7), Mutaforma13_33 (F1), NewHope4_37 (F1), Nimbo_33 (F1), Nitzel_34 (F1), Nivrat_33 (F1), NormanBulbieJr_33 (F1), Ochi17_31 (F1), Ogopogo_33 (F1), Okabe_34 (F8), OldBen_33 (F1), OlympiaSaint_33 (F1), Ovechkin_34 (F1), OwlsT2W_34 (F1), PHappiness_33 (F1), PMC_33 (F1), Pacc40_33 (F1), PatoPoderoso_33 (F1), Phalconet_33 (F1), Phanphagia_30 (F1), Phasih_34 (F1), Phatniss_34 (F1), PhesterPhotato_33 (F1), Philus_33 (F1), Phrann_28 (N), Piper2020_35 (F1), Pippy_27 (F1), Plumbus_35 (F1), Poenanya_33 (F1), Polka14_34 (F1), Pollywog_33 (F1), Polo2Bam_38 (F1), PopTart_33 (F1), Priscilla_33 (F1), QuickMath_34 (F1), Quico_34 (F1), Radiance_33 (F1), RedBird_33 (F1), Renaud18_33 (F4), Rialto_37 (F1), RitaG_34 (F1), Rita_34 (F1), Rockne_33 (F1), RockyHorror_34 (F1), Royals2015_33 (F1), Rubeelu_29 (N), Ruby_35 (F1), SG4_34 (F1), Saal_33 (F1), Sabbb_34 (F1), Sandalphon_34 (F1), Sarma624_29 (F1), Sassafras_34 (F1), SassyB_33 (F1), Scottish_34 (F1), SeaLumen_37 (F1), Seagreen_34 (F1), Shauna1_30 (F1), ShiLan_33 (F1), ShowerHandel_33 (F1), ShroomBoi_30 (F1), SiSi_33 (F1), SilverChicken_41 (F2), Slim_35 (F1), Soul22_38 (F2), Sparkdehlily_33 (F1), Spartacus_35 (F1), Spikelee_35 (F1), Spoonbill_33 (F1), StAnnes_32 (F1), Stap_34 (F1), Starcevich_37 (F1), Strokeseat_34 (F1), SuperGrey_34 (F1), SwagPigglett_33 (F1), TDanisky_33 (F1), TPA4_34 (singleton), Taj_33 (F1), TootsiePop_34 (F1), Tootsieroll_34 (F1), Totinger_34 (F1), Tweety_33 (F1), UncleRicky_36 (F1), VRedHorse_33 (F1), Velveteen_29 (F1), Veteran_33 (F1), Violac_34 (F1), Vivum_34 (F1), Wachhund_33 (F1), Wee_34 (F1), Whatsapiecost_34 (F1), Whouxphf_34 (F1), WillSterrel_35 (F1), XFactor_33 (F1), Xavia_29 (P3), Yorick_33 (F1), Zerg_33 (F1), Zizzle_33 (F1),

Start 18:
• Found in 98 of 304 (32.2%) of genes in pham
• Manual Annotations of this start: 22 of 281
• Called 23.5% of time when present
• Phage (with cluster) where this start called: AlpineSix_34 (F1), Cheesepuff_36 (F1), Chevrolet_34 (F1), Crumble_27 (F1), DoRead_34 (F1), Fastidio_35 (F1), FreddyB_33 (F1), GigiOuiOui_33 (F1), Grimmer_35 (F1), Juniper1_33 (F1), Leperchaun_33 (F1), LittleShirley_36 (F1), Madiba_31 (F1), MulchExplorer_35 (F1), Nichirin_33 (F1), OfUltron_33 (F1), Oksu_34 (F1), PaintedDog_32 (I1), Peridot_36 (F1), PhlipPhlop_34

(F1), Ramsey_36 (F1), Seabastian_33 (F1), Tchotchke_33 (F1),

Start 22:
• Found in 5 of 304 (1.6%) of genes in pham
• Manual Annotations of this start: 5 of 281
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aleemily_31 (DZ), Cafasso_32 (DZ), ModicumRichard_32 (DZ), Morgana_32 (DZ), ObLaDi_32 (DZ),

Summary by clusters:

There are 17 clusters represented in this pham: P2, F1, F2, P1, F4, F5, F7, P3, I1, I3, F, singleton, AJ, N, F8, DZ, P6,

Info for manual annotations of cluster DZ:
•Start number 22 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster F:
•Start number 17 was manually annotated 1 time for cluster F.

Info for manual annotations of cluster F1:
•Start number 17 was manually annotated 215 times for cluster F1.
•Start number 18 was manually annotated 22 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 17 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F4:
•Start number 17 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster F5:
•Start number 17 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster F7:
•Start number 17 was manually annotated 1 time for cluster F7.

Info for manual annotations of cluster I1:
•Start number 17 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster N:
•Start number 15 was manually annotated 10 times for cluster N.
•Start number 16 was manually annotated 14 times for cluster N.
•Start number 17 was manually annotated 4 times for cluster N.

Info for manual annotations of cluster P1:
•Start number 15 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster P2:
•Start number 15 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:
•Start number 17 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P6:
•Start number 16 was manually annotated 1 time for cluster P6.

Gene Information:

Gene: Aggie_30 Start: 24741, Stop: 25109, Start Num: 16
Candidate Starts for Aggie_30:
(Start: 16 @24741 has 15 MA's), (26, 24834), (29, 24852), (38, 24939), (40, 24960),

Gene: Akhila_27 Start: 24837, Stop: 25211, Start Num: 17
Candidate Starts for Akhila_27:
(3, 24318), (Start: 17 @24837 has 227 MA's), (20, 24852), (21, 24864), (40, 25071), (44, 25104),

Gene: Aleemily_31 Start: 26903, Stop: 27274, Start Num: 22
Candidate Starts for Aleemily_31:
(7, 26516), (14, 26828), (Start: 22 @26903 has 5 MA's), (27, 26972), (31, 26984), (33, 27005), (36, 27053),

Gene: Alexphander_36 Start: 29528, Stop: 29902, Start Num: 17
Candidate Starts for Alexphander_36:
(Start: 17 @29528 has 227 MA's), (19, 29534), (20, 29543), (21, 29555), (40, 29762), (44, 29795), (50, 29837),

Gene: Aloeri_35 Start: 29381, Stop: 29755, Start Num: 17
Candidate Starts for Aloeri_35:
(Start: 17 @29381 has 227 MA's), (20, 29396), (21, 29408), (40, 29615), (44, 29648),

Gene: AlpineSix_34 Start: 28978, Stop: 29349, Start Num: 18
Candidate Starts for AlpineSix_34:
(Start: 17 @28975 has 227 MA's), (Start: 18 @28978 has 22 MA's), (20, 28990), (21, 29002), (40, 29209), (43, 29239), (44, 29242), (50, 29284),

Gene: ArcusAngelus_33 Start: 29310, Stop: 29684, Start Num: 17
Candidate Starts for ArcusAngelus_33:
(Start: 17 @29310 has 227 MA's), (Start: 18 @29313 has 22 MA's), (20, 29325), (21, 29337), (25, 29397), (40, 29544), (44, 29577), (50, 29619),

Gene: Ardmore_32 Start: 28754, Stop: 29128, Start Num: 17
Candidate Starts for Ardmore_32:
(Start: 17 @28754 has 227 MA's), (20, 28769), (21, 28781), (40, 28988), (44, 29021),

Gene: Aubs_34 Start: 29089, Stop: 29463, Start Num: 17
Candidate Starts for Aubs_34:
(Start: 17 @29089 has 227 MA's), (20, 29104), (21, 29116), (40, 29323), (44, 29356), (50, 29398),

Gene: Awesomesauce_34 Start: 28643, Stop: 29017, Start Num: 17
Candidate Starts for Awesomesauce_34:
(Start: 17 @28643 has 227 MA's), (20, 28658), (21, 28670), (25, 28730), (40, 28877), (44, 28910),

Gene: BabeRuth_27 Start: 23790, Stop: 24299, Start Num: 15
Candidate Starts for BabeRuth_27:
(1, 23220), (Start: 15 @23790 has 12 MA's), (28, 23916), (32, 23934), (38, 24009), (40, 24036), (42, 24057), (46, 24120), (49, 24189),

Gene: Babsiella_29 Start: 25555, Stop: 25917, Start Num: 17
Candidate Starts for Babsiella_29:
(Start: 17 @25555 has 227 MA's), (Start: 18 @25558 has 22 MA's), (37, 25756), (38, 25759), (40, 25780), (44, 25813),

Gene: Batiatus_33 Start: 28747, Stop: 29121, Start Num: 17
Candidate Starts for Batiatus_33:
(Start: 17 @28747 has 227 MA's), (20, 28762), (21, 28774), (40, 28981), (44, 29014),

Gene: Beakin_34 Start: 28661, Stop: 29035, Start Num: 17
Candidate Starts for Beakin_34:
(Start: 17 @28661 has 227 MA's), (Start: 18 @28664 has 22 MA's), (20, 28676), (21, 28688), (25, 28748), (38, 28874), (40, 28895), (44, 28928), (50, 28970),

Gene: Beanstalk_35 Start: 28952, Stop: 29326, Start Num: 17
Candidate Starts for Beanstalk_35:
(Start: 17 @28952 has 227 MA's), (20, 28967), (21, 28979), (40, 29186), (44, 29219),

Gene: BigPhil_29 Start: 24971, Stop: 25345, Start Num: 17
Candidate Starts for BigPhil_29:
(Start: 17 @24971 has 227 MA's), (19, 24977), (20, 24986), (21, 24998), (40, 25205), (44, 25238),

Gene: Bipolar_30 Start: 27833, Stop: 28207, Start Num: 17
Candidate Starts for Bipolar_30:
(Start: 17 @27833 has 227 MA's), (19, 27839), (20, 27848), (21, 27860), (40, 28067), (44, 28100),

Gene: Blarby_42 Start: 29226, Stop: 29600, Start Num: 17
Candidate Starts for Blarby_42:
(Start: 17 @29226 has 227 MA's), (20, 29241), (21, 29253), (40, 29460), (44, 29493),

Gene: Blexus_33 Start: 29083, Stop: 29457, Start Num: 17
Candidate Starts for Blexus_33:
(11, 28963), (Start: 17 @29083 has 227 MA's), (20, 29098), (21, 29110), (40, 29317), (44, 29350),

Gene: BlueCrab_33 Start: 28933, Stop: 29307, Start Num: 17
Candidate Starts for BlueCrab_33:
(Start: 17 @28933 has 227 MA's), (20, 28948), (21, 28960), (40, 29167), (44, 29200), (50, 29242),

Gene: Bluvara_30 Start: 25885, Stop: 26265, Start Num: 17
Candidate Starts for Bluvara_30:
(Start: 17 @25885 has 227 MA's), (Start: 18 @25888 has 22 MA's), (30, 26008), (37, 26086), (38, 26089),

Gene: Bobi_35 Start: 29460, Stop: 29834, Start Num: 17
Candidate Starts for Bobi_35:
(Start: 17 @29460 has 227 MA's), (20, 29475), (21, 29487), (40, 29694), (44, 29727),

Gene: BodEinwohner17_33 Start: 29153, Stop: 29527, Start Num: 17
Candidate Starts for BodEinwohner17_33:
(11, 29033), (Start: 17 @29153 has 227 MA's), (20, 29168), (21, 29180), (40, 29387), (44, 29420),

Gene: Boomer_35 Start: 28823, Stop: 29197, Start Num: 17
Candidate Starts for Boomer_35:
(Start: 17 @28823 has 227 MA's), (20, 28838), (21, 28850), (31, 28952), (32, 28961), (40, 29057), (44, 29090),

Gene: Bosection6_30 Start: 24740, Stop: 25108, Start Num: 16
Candidate Starts for Bosection6_30:
(Start: 16 @24740 has 15 MA's), (26, 24833), (29, 24851), (38, 24938), (40, 24959),

Gene: Brocalys_28 Start: 24550, Stop: 24924, Start Num: 17
Candidate Starts for Brocalys_28:
(Start: 17 @24550 has 227 MA's), (20, 24565), (21, 24577), (25, 24637), (40, 24784), (43, 24814), (44, 24817),

Gene: Brookers_31 Start: 27696, Stop: 28070, Start Num: 17
Candidate Starts for Brookers_31:
(Start: 17 @27696 has 227 MA's), (20, 27711), (21, 27723), (40, 27930), (44, 27963),

Gene: Brushbloom_34 Start: 28771, Stop: 29145, Start Num: 17
Candidate Starts for Brushbloom_34:
(Start: 17 @28771 has 227 MA's), (20, 28786), (21, 28798), (40, 29005), (44, 29038),

Gene: Bubbles123_35 Start: 29738, Stop: 30112, Start Num: 17
Candidate Starts for Bubbles123_35:
(Start: 17 @29738 has 227 MA's), (20, 29753), (21, 29765), (40, 29972), (44, 30005), (50, 30047),

Gene: Burwell21_33 Start: 28937, Stop: 29311, Start Num: 17
Candidate Starts for Burwell21_33:
(Start: 17 @28937 has 227 MA's), (20, 28952), (21, 28964), (40, 29171), (43, 29201), (44, 29204), (50, 29246),

Gene: Butters_29 Start: 24134, Stop: 24508, Start Num: 17
Candidate Starts for Butters_29:
(10, 23966), (13, 24044), (Start: 17 @24134 has 227 MA's), (28, 24251),

Gene: BuzzLyseyear_36 Start: 29552, Stop: 29926, Start Num: 17
Candidate Starts for BuzzLyseyear_36:
(Start: 17 @29552 has 227 MA's), (19, 29558), (20, 29567), (21, 29579), (40, 29786), (44, 29819), (50, 29861),

Gene: Byougenkin_33 Start: 28835, Stop: 29209, Start Num: 17
Candidate Starts for Byougenkin_33:
(Start: 17 @28835 has 227 MA's), (20, 28850), (21, 28862), (40, 29069), (44, 29102),

Gene: Cabrinians_33 Start: 29015, Stop: 29389, Start Num: 17
Candidate Starts for Cabrinians_33:
(Start: 17 @29015 has 227 MA's), (20, 29030), (21, 29042), (40, 29249), (43, 29279), (44, 29282), (50, 29324),

Gene: Cafasso_32 Start: 27477, Stop: 27848, Start Num: 22
Candidate Starts for Cafasso_32:
(7, 27090), (14, 27402), (Start: 22 @27477 has 5 MA's), (27, 27546), (31, 27558), (33, 27579), (36, 27627),

Gene: CaptainTrips_34 Start: 29160, Stop: 29534, Start Num: 17
Candidate Starts for CaptainTrips_34:
(Start: 17 @29160 has 227 MA's), (20, 29175), (21, 29187), (35, 29343), (40, 29394), (44, 29427),

Gene: Cerasum_29 Start: 24971, Stop: 25345, Start Num: 17
Candidate Starts for Cerasum_29:
(Start: 17 @24971 has 227 MA's), (19, 24977), (20, 24986), (21, 24998), (40, 25205), (44, 25238),

Gene: Charlie_30 Start: 24740, Stop: 25108, Start Num: 16
Candidate Starts for Charlie_30:
(Start: 16 @24740 has 15 MA's), (26, 24833), (29, 24851), (38, 24938), (40, 24959),

Gene: Che8_35 Start: 29204, Stop: 29578, Start Num: 17
Candidate Starts for Che8_35:
(Start: 17 @29204 has 227 MA's), (19, 29210), (20, 29219), (21, 29231), (25, 29291), (40, 29438), (44, 29471), (50, 29513),

Gene: Cheesepuff_36 Start: 30026, Stop: 30397, Start Num: 18
Candidate Starts for Cheesepuff_36:
(Start: 17 @30023 has 227 MA's), (Start: 18 @30026 has 22 MA's), (20, 30038), (21, 30050), (40, 30257), (44, 30290),

Gene: Chevrolet_34 Start: 29314, Stop: 29685, Start Num: 18
Candidate Starts for Chevrolet_34:
(Start: 17 @29311 has 227 MA's), (Start: 18 @29314 has 22 MA's), (20, 29326), (21, 29338), (25, 29398), (40, 29545), (44, 29578), (50, 29620),

Gene: ChickenDinner_35 Start: 29381, Stop: 29755, Start Num: 17
Candidate Starts for ChickenDinner_35:
(Start: 17 @29381 has 227 MA's), (20, 29396), (21, 29408), (40, 29615), (44, 29648),

Gene: Chuckly_33 Start: 28936, Stop: 29310, Start Num: 17
Candidate Starts for Chuckly_33:
(Start: 17 @28936 has 227 MA's), (Start: 18 @28939 has 22 MA's), (20, 28951), (21, 28963), (40, 29170), (44, 29203), (50, 29245),

Gene: Clank_31 Start: 28193, Stop: 28567, Start Num: 17
Candidate Starts for Clank_31:
(Start: 17 @28193 has 227 MA's), (Start: 18 @28196 has 22 MA's), (20, 28208), (21, 28220), (40, 28427), (44, 28460), (50, 28502),

Gene: Clifton_27 Start: 24901, Stop: 25275, Start Num: 17
Candidate Starts for Clifton_27:
(Start: 17 @24901 has 227 MA's), (20, 24916), (21, 24928), (40, 25135), (43, 25165), (44, 25168), (50, 25210),

Gene: Coco12_33 Start: 28820, Stop: 29194, Start Num: 17
Candidate Starts for Coco12_33:

(Start: 17 @28820 has 227 MA's), (20, 28835), (21, 28847), (40, 29054), (44, 29087),

Gene: Corium_33 Start: 28960, Stop: 29334, Start Num: 17
Candidate Starts for Corium_33:
(Start: 17 @28960 has 227 MA's), (20, 28975), (21, 28987), (40, 29194), (44, 29227),

Gene: Cornie_33 Start: 29258, Stop: 29632, Start Num: 17
Candidate Starts for Cornie_33:
(Start: 17 @29258 has 227 MA's), (20, 29273), (21, 29285), (40, 29492), (44, 29525),

Gene: Cornucopia_34 Start: 28779, Stop: 29153, Start Num: 17
Candidate Starts for Cornucopia_34:
(Start: 17 @28779 has 227 MA's), (Start: 18 @28782 has 22 MA's), (20, 28794), (21, 28806), (25, 28866), (40, 29013), (43, 29043), (44, 29046), (50, 29088),

Gene: Crumble_27 Start: 24953, Stop: 25324, Start Num: 18
Candidate Starts for Crumble_27:
(Start: 17 @24950 has 227 MA's), (Start: 18 @24953 has 22 MA's), (20, 24965), (21, 24977), (40, 25184), (44, 25217), (50, 25259),

Gene: Cubone_30 Start: 24762, Stop: 25130, Start Num: 16
Candidate Starts for Cubone_30:
(Start: 16 @24762 has 15 MA's), (26, 24855), (38, 24960), (40, 24981),

Gene: DLane_33 Start: 28724, Stop: 29098, Start Num: 17
Candidate Starts for DLane_33:
(Start: 17 @28724 has 227 MA's), (20, 28739), (21, 28751), (40, 28958), (44, 28991),

Gene: DRBy19_33 Start: 28862, Stop: 29236, Start Num: 17
Candidate Starts for DRBy19_33:
(Start: 17 @28862 has 227 MA's), (Start: 18 @28865 has 22 MA's), (20, 28877), (21, 28889), (40, 29096), (44, 29129), (50, 29171),

Gene: DaWorst_35 Start: 29302, Stop: 29676, Start Num: 17
Candidate Starts for DaWorst_35:
(Start: 17 @29302 has 227 MA's), (19, 29308), (20, 29317), (21, 29329), (40, 29536), (44, 29569), (50, 29611),

Gene: DaddyRickover_33 Start: 28945, Stop: 29319, Start Num: 17
Candidate Starts for DaddyRickover_33:
(Start: 17 @28945 has 227 MA's), (19, 28951), (20, 28960), (21, 28972), (40, 29179), (44, 29212), (50, 29254),

Gene: Daenerys_33 Start: 28766, Stop: 29140, Start Num: 17
Candidate Starts for Daenerys_33:
(Start: 17 @28766 has 227 MA's), (19, 28772), (20, 28781), (21, 28793), (40, 29000), (44, 29033), (50, 29075),

Gene: Dante_33 Start: 28884, Stop: 29258, Start Num: 17
Candidate Starts for Dante_33:
(Start: 17 @28884 has 227 MA's), (20, 28899), (21, 28911), (40, 29118), (44, 29151), (50, 29193),

Gene: DeadP_33 Start: 28921, Stop: 29295, Start Num: 17

Candidate Starts for DeadP_33:
(Start: 17 @28921 has 227 MA's), (20, 28936), (21, 28948), (40, 29155), (44, 29188), (50, 29230),

Gene: Deb65_33 Start: 28767, Stop: 29141, Start Num: 17
Candidate Starts for Deb65_33:
(Start: 17 @28767 has 227 MA's), (20, 28782), (21, 28794), (40, 29001), (44, 29034), (50, 29076),

Gene: DillTech15_33 Start: 28852, Stop: 29226, Start Num: 17
Candidate Starts for DillTech15_33:
(Start: 17 @28852 has 227 MA's), (Start: 18 @28855 has 22 MA's), (20, 28867), (21, 28879), (40, 29086), (44, 29119),

Gene: DirtMcgirt_34 Start: 28587, Stop: 28961, Start Num: 17
Candidate Starts for DirtMcgirt_34:
(Start: 17 @28587 has 227 MA's), (Start: 18 @28590 has 22 MA's), (20, 28602), (21, 28614), (25, 28674), (40, 28821), (44, 28854), (50, 28896),

Gene: DoRead_34 Start: 28999, Stop: 29370, Start Num: 18
Candidate Starts for DoRead_34:
(Start: 17 @28996 has 227 MA's), (Start: 18 @28999 has 22 MA's), (20, 29011), (21, 29023), (25, 29083), (40, 29230), (44, 29263), (50, 29305),

Gene: DocMcStuffins_35 Start: 29381, Stop: 29755, Start Num: 17
Candidate Starts for DocMcStuffins_35:
(Start: 17 @29381 has 227 MA's), (20, 29396), (21, 29408), (40, 29615), (44, 29648),

Gene: Donkeykong_33 Start: 28947, Stop: 29321, Start Num: 17
Candidate Starts for Donkeykong_33:
(Start: 17 @28947 has 227 MA's), (20, 28962), (21, 28974), (40, 29181), (44, 29214),

Gene: Doomphist_33 Start: 28884, Stop: 29258, Start Num: 17
Candidate Starts for Doomphist_33:
(Start: 17 @28884 has 227 MA's), (19, 28890), (20, 28899), (21, 28911), (40, 29118), (44, 29151),

Gene: Doomslug_37 Start: 28595, Stop: 28969, Start Num: 17
Candidate Starts for Doomslug_37:
(Start: 17 @28595 has 227 MA's), (20, 28610), (21, 28622), (40, 28829), (44, 28862),

Gene: Dorothy_33 Start: 28730, Stop: 29104, Start Num: 17
Candidate Starts for Dorothy_33:
(Start: 17 @28730 has 227 MA's), (19, 28736), (20, 28745), (21, 28757), (40, 28964), (44, 28997), (50, 29039),

Gene: DosHalletts_35 Start: 29148, Stop: 29522, Start Num: 17
Candidate Starts for DosHalletts_35:
(Start: 17 @29148 has 227 MA's), (19, 29154), (20, 29163), (21, 29175), (25, 29235), (40, 29382), (44, 29415), (50, 29457),

Gene: DotProduct_33 Start: 28753, Stop: 29127, Start Num: 17
Candidate Starts for DotProduct_33:
(Start: 17 @28753 has 227 MA's), (Start: 18 @28756 has 22 MA's), (20, 28768), (21, 28780), (40, 28987), (44, 29020),

Gene: Doug_34 Start: 29325, Stop: 29699, Start Num: 17
Candidate Starts for Doug_34:
(Start: 17 @29325 has 227 MA's), (20, 29340), (21, 29352), (40, 29559), (44, 29592), (50, 29634),

Gene: Drago_34 Start: 28580, Stop: 28954, Start Num: 17
Candidate Starts for Drago_34:
(Start: 17 @28580 has 227 MA's), (Start: 18 @28583 has 22 MA's), (20, 28595), (21, 28607), (40, 28814), (44, 28847), (50, 28889),

Gene: Duplicity_30 Start: 24740, Stop: 25108, Start Num: 16
Candidate Starts for Duplicity_30:
(Start: 16 @24740 has 15 MA's), (26, 24833), (29, 24851), (38, 24938), (40, 24959),

Gene: EGUnicorn_30 Start: 24740, Stop: 25108, Start Num: 16
Candidate Starts for EGUnicorn_30:
(Start: 16 @24740 has 15 MA's), (38, 24938), (40, 24959),

Gene: Eish_33 Start: 29472, Stop: 29846, Start Num: 17
Candidate Starts for Eish_33:
(Start: 17 @29472 has 227 MA's), (Start: 18 @29475 has 22 MA's), (20, 29487), (21, 29499), (40, 29706), (44, 29739), (50, 29781),

Gene: EleanorGeorge_34 Start: 29497, Stop: 29871, Start Num: 17
Candidate Starts for EleanorGeorge_34:
(Start: 17 @29497 has 227 MA's), (31, 29626), (32, 29635), (40, 29731), (44, 29764),

Gene: EmiMonkey_34 Start: 30376, Stop: 30750, Start Num: 17
Candidate Starts for EmiMonkey_34:
(Start: 17 @30376 has 227 MA's), (Start: 18 @30379 has 22 MA's), (20, 30391), (21, 30403), (40, 30610), (44, 30643), (50, 30685),

Gene: Emma_35 Start: 29365, Stop: 29739, Start Num: 17
Candidate Starts for Emma_35:
(Start: 17 @29365 has 227 MA's), (20, 29380), (21, 29392), (40, 29599), (44, 29632),

Gene: Emmaloid_35 Start: 30145, Stop: 30519, Start Num: 17
Candidate Starts for Emmaloid_35:
(Start: 17 @30145 has 227 MA's), (19, 30151), (20, 30160), (21, 30172), (40, 30379), (44, 30412), (50, 30454),

Gene: Empress_34 Start: 30180, Stop: 30554, Start Num: 17
Candidate Starts for Empress_34:
(Start: 17 @30180 has 227 MA's), (20, 30195), (21, 30207), (40, 30414), (44, 30447), (50, 30489),

Gene: Enby_35 Start: 29026, Stop: 29400, Start Num: 17
Candidate Starts for Enby_35:
(Start: 17 @29026 has 227 MA's), (31, 29155), (32, 29164), (40, 29260), (44, 29293),

Gene: Enzomatic_38 Start: 28943, Stop: 29317, Start Num: 17
Candidate Starts for Enzomatic_38:
(Start: 17 @28943 has 227 MA's), (Start: 18 @28946 has 22 MA's), (20, 28958), (21, 28970), (25, 29030), (40, 29177), (44, 29210),

Gene: Eradicator_33 Start: 28867, Stop: 29241, Start Num: 17
Candidate Starts for Eradicator_33:
(Start: 17 @28867 has 227 MA's), (20, 28882), (21, 28894), (40, 29101), (44, 29134), (50, 29176),

Gene: Estave1_31 Start: 28284, Stop: 28658, Start Num: 17
Candidate Starts for Estave1_31:
(Start: 17 @28284 has 227 MA's), (Start: 18 @28287 has 22 MA's), (20, 28299), (21, 28311), (40, 28518), (44, 28551),

Gene: Fancypants_33 Start: 28773, Stop: 29147, Start Num: 17
Candidate Starts for Fancypants_33:
(Start: 17 @28773 has 227 MA's), (Start: 18 @28776 has 22 MA's), (20, 28788), (21, 28800), (25, 28860), (40, 29007), (44, 29040), (50, 29082),

Gene: Fastidio_35 Start: 29084, Stop: 29455, Start Num: 18
Candidate Starts for Fastidio_35:
(Start: 17 @29081 has 227 MA's), (Start: 18 @29084 has 22 MA's), (20, 29096), (21, 29108), (40, 29315), (44, 29348),

Gene: Filuzino_33 Start: 28715, Stop: 29089, Start Num: 17
Candidate Starts for Filuzino_33:
(Start: 17 @28715 has 227 MA's), (20, 28730), (21, 28742), (40, 28949), (44, 28982),

Gene: Firehouse51_34 Start: 29554, Stop: 29928, Start Num: 17
Candidate Starts for Firehouse51_34:
(Start: 17 @29554 has 227 MA's), (20, 29569), (21, 29581), (40, 29788), (44, 29821),

Gene: Flathead_33 Start: 29361, Stop: 29735, Start Num: 17
Candidate Starts for Flathead_33:
(Start: 17 @29361 has 227 MA's), (20, 29376), (21, 29388), (40, 29595), (44, 29628),

Gene: Florinda_33 Start: 28765, Stop: 29139, Start Num: 17
Candidate Starts for Florinda_33:
(Start: 17 @28765 has 227 MA's), (Start: 18 @28768 has 22 MA's), (20, 28780), (21, 28792), (40, 28999), (44, 29032), (50, 29074),

Gene: Frankie_37 Start: 29909, Stop: 30283, Start Num: 17
Candidate Starts for Frankie_37:
(Start: 17 @29909 has 227 MA's), (19, 29915), (20, 29924), (21, 29936), (40, 30143), (44, 30176), (50, 30218),

Gene: FreddyB_33 Start: 29032, Stop: 29403, Start Num: 18
Candidate Starts for FreddyB_33:
(Start: 17 @29029 has 227 MA's), (Start: 18 @29032 has 22 MA's), (20, 29044), (21, 29056), (40, 29263), (44, 29296),

Gene: Fruitloop_32 Start: 28910, Stop: 29284, Start Num: 17
Candidate Starts for Fruitloop_32:
(Start: 17 @28910 has 227 MA's), (20, 28925), (21, 28937), (40, 29144), (44, 29177),

Gene: Fulbright_29 Start: 24563, Stop: 24943, Start Num: 16
Candidate Starts for Fulbright_29:
(Start: 16 @24563 has 15 MA's), (38, 24773), (40, 24794),

Gene: GMA4_24 Start: 21879, Stop: 22325, Start Num: 17
Candidate Starts for GMA4_24:
(Start: 17 @21879 has 227 MA's), (20, 21897), (31, 22008), (33, 22029), (41, 22122), (42, 22143),

Gene: GUmbie_33 Start: 28784, Stop: 29158, Start Num: 17
Candidate Starts for GUmbie_33:
(Start: 17 @28784 has 227 MA's), (19, 28790), (20, 28799), (21, 28811), (40, 29018), (44, 29051), (50, 29093),

Gene: Galactic_35 Start: 29602, Stop: 29976, Start Num: 17
Candidate Starts for Galactic_35:
(Start: 17 @29602 has 227 MA's), (20, 29617), (21, 29629), (40, 29836), (44, 29869),

Gene: Gandalph_34 Start: 29100, Stop: 29474, Start Num: 17
Candidate Starts for Gandalph_34:
(Start: 17 @29100 has 227 MA's), (20, 29115), (21, 29127), (40, 29334), (44, 29367),

Gene: Geralt_33 Start: 28766, Stop: 29140, Start Num: 17
Candidate Starts for Geralt_33:
(Start: 17 @28766 has 227 MA's), (20, 28781), (21, 28793), (40, 29000), (44, 29033), (50, 29075),

Gene: GigiOuiOui_33 Start: 28899, Stop: 29270, Start Num: 18
Candidate Starts for GigiOuiOui_33:
(Start: 17 @28896 has 227 MA's), (Start: 18 @28899 has 22 MA's), (20, 28911), (21, 28923), (25, 28983), (40, 29130), (44, 29163),

Gene: Girafales_34 Start: 28573, Stop: 28947, Start Num: 17
Candidate Starts for Girafales_34:
(Start: 17 @28573 has 227 MA's), (Start: 18 @28576 has 22 MA's), (20, 28588), (21, 28600), (40, 28807), (44, 28840), (50, 28882),

Gene: Girr_35 Start: 29802, Stop: 30176, Start Num: 17
Candidate Starts for Girr_35:
(Start: 17 @29802 has 227 MA's), (20, 29817), (21, 29829), (40, 30036), (44, 30069), (50, 30111),

Gene: Gorge_33 Start: 28996, Stop: 29370, Start Num: 17
Candidate Starts for Gorge_33:
(Start: 17 @28996 has 227 MA's), (Start: 18 @28999 has 22 MA's), (20, 29011), (21, 29023), (40, 29230), (44, 29263), (50, 29305),

Gene: Grimmer_35 Start: 29490, Stop: 29861, Start Num: 18
Candidate Starts for Grimmer_35:
(Start: 17 @29487 has 227 MA's), (Start: 18 @29490 has 22 MA's), (20, 29502), (21, 29514), (40, 29721), (44, 29754), (50, 29796),

Gene: Guppsters_35 Start: 29282, Stop: 29656, Start Num: 17
Candidate Starts for Guppsters_35:
(Start: 17 @29282 has 227 MA's), (20, 29297), (21, 29309), (35, 29465), (40, 29516), (44, 29549),

Gene: HC_30 Start: 25611, Stop: 25973, Start Num: 17
Candidate Starts for HC_30:

(Start: 17 @25611 has 227 MA's), (Start: 18 @25614 has 22 MA's), (37, 25812), (38, 25815), (40, 25836), (44, 25869),

Gene: Hades_34 Start: 29093, Stop: 29467, Start Num: 17
Candidate Starts for Hades_34:
(Start: 17 @29093 has 227 MA's), (Start: 18 @29096 has 22 MA's), (20, 29108), (21, 29120), (25, 29180), (40, 29327), (44, 29360), (50, 29402),

Gene: Hamulus_34 Start: 29756, Stop: 30130, Start Num: 17
Candidate Starts for Hamulus_34:
(Start: 17 @29756 has 227 MA's), (19, 29762), (20, 29771), (21, 29783), (40, 29990), (44, 30023), (50, 30065),

Gene: Hanako_27 Start: 23790, Stop: 24299, Start Num: 15
Candidate Starts for Hanako_27:
(1, 23220), (Start: 15 @23790 has 12 MA's), (28, 23916), (32, 23934), (38, 24009), (40, 24036), (42, 24057), (46, 24120), (49, 24189),

Gene: Harley_33 Start: 28702, Stop: 29076, Start Num: 17
Candidate Starts for Harley_33:
(Start: 17 @28702 has 227 MA's), (Start: 18 @28705 has 22 MA's), (20, 28717), (21, 28729), (25, 28789), (40, 28936), (44, 28969), (50, 29011),

Gene: Hegedechwinu_34 Start: 28791, Stop: 29165, Start Num: 17
Candidate Starts for Hegedechwinu_34:
(Start: 17 @28791 has 227 MA's), (20, 28806), (21, 28818), (40, 29025), (44, 29058),

Gene: Hlubikazi_34 Start: 29588, Stop: 29962, Start Num: 17
Candidate Starts for Hlubikazi_34:
(Start: 17 @29588 has 227 MA's), (20, 29603), (21, 29615), (40, 29822), (44, 29855),

Gene: IMpilo_32 Start: 28569, Stop: 28943, Start Num: 17
Candidate Starts for IMpilo_32:
(Start: 17 @28569 has 227 MA's), (20, 28584), (21, 28596), (40, 28803), (44, 28836), (50, 28878),

Gene: IbOuu_34 Start: 29341, Stop: 29715, Start Num: 17
Candidate Starts for IbOuu_34:
(Start: 17 @29341 has 227 MA's), (Start: 18 @29344 has 22 MA's), (20, 29356), (21, 29368), (25, 29428), (40, 29575), (43, 29605), (44, 29608),

Gene: Ibhubesi_33 Start: 28709, Stop: 29083, Start Num: 17
Candidate Starts for Ibhubesi_33:
(Start: 17 @28709 has 227 MA's), (Start: 18 @28712 has 22 MA's), (20, 28724), (21, 28736), (25, 28796), (40, 28943), (44, 28976), (50, 29018),

Gene: Impisi_29 Start: 24410, Stop: 24775, Start Num: 17
Candidate Starts for Impisi_29:
(Start: 17 @24410 has 227 MA's), (Start: 18 @24413 has 22 MA's), (30, 24533), (37, 24611), (38, 24614),

Gene: Inventum_33 Start: 29446, Stop: 29820, Start Num: 17
Candidate Starts for Inventum_33:

(Start: 17 @29446 has 227 MA's), (19, 29452), (20, 29461), (21, 29473), (40, 29680), (44, 29713), (50, 29755),

Gene: IrishSherpFalk_35 Start: 30353, Stop: 30727, Start Num: 17
Candidate Starts for IrishSherpFalk_35:
(Start: 17 @30353 has 227 MA's), (Start: 18 @30356 has 22 MA's), (20, 30368), (21, 30380), (40, 30587), (43, 30617), (44, 30620), (50, 30662),

Gene: JalFarm20_36 Start: 29841, Stop: 30215, Start Num: 17
Candidate Starts for JalFarm20_36:
(Start: 17 @29841 has 227 MA's), (20, 29856), (21, 29868), (40, 30075), (44, 30108),

Gene: James_33 Start: 28953, Stop: 29327, Start Num: 17
Candidate Starts for James_33:
(Start: 17 @28953 has 227 MA's), (Start: 18 @28956 has 22 MA's), (20, 28968), (21, 28980), (40, 29187), (44, 29220), (50, 29262),

Gene: Jant_34 Start: 28935, Stop: 29309, Start Num: 17
Candidate Starts for Jant_34:
(Start: 17 @28935 has 227 MA's), (20, 28950), (21, 28962), (40, 29169), (44, 29202),

Gene: Jarcob_33 Start: 28989, Stop: 29363, Start Num: 17
Candidate Starts for Jarcob_33:
(Start: 17 @28989 has 227 MA's), (20, 29004), (21, 29016), (40, 29223), (43, 29253), (44, 29256), (50, 29298),

Gene: Jennelsea_27 Start: 24901, Stop: 25275, Start Num: 17
Candidate Starts for Jennelsea_27:
(Start: 17 @24901 has 227 MA's), (20, 24916), (21, 24928), (40, 25135), (43, 25165), (44, 25168), (50, 25210),

Gene: Jinglebell_32 Start: 28974, Stop: 29348, Start Num: 17
Candidate Starts for Jinglebell_32:
(Start: 17 @28974 has 227 MA's), (Start: 18 @28977 has 22 MA's), (20, 28989), (21, 29001), (40, 29208), (43, 29238), (44, 29241), (50, 29283),

Gene: Job42_37 Start: 30762, Stop: 31136, Start Num: 17
Candidate Starts for Job42_37:
(Start: 17 @30762 has 227 MA's), (19, 30768), (20, 30777), (21, 30789), (25, 30849), (40, 30996), (44, 31029), (50, 31071),

Gene: JoeyJr_33 Start: 28934, Stop: 29308, Start Num: 17
Candidate Starts for JoeyJr_33:
(Start: 17 @28934 has 227 MA's), (19, 28940), (20, 28949), (21, 28961), (40, 29168), (44, 29201), (50, 29243),

Gene: Journey_30 Start: 24740, Stop: 25108, Start Num: 16
Candidate Starts for Journey_30:
(Start: 16 @24740 has 15 MA's), (26, 24833), (29, 24851), (38, 24938), (40, 24959),

Gene: Juice456_35 Start: 30062, Stop: 30436, Start Num: 17
Candidate Starts for Juice456_35:
(Start: 17 @30062 has 227 MA's), (20, 30077), (21, 30089), (40, 30296), (44, 30329),

Gene: Juniper1_33 Start: 28735, Stop: 29106, Start Num: 18
Candidate Starts for Juniper1_33:
(Start: 17 @28732 has 227 MA's), (Start: 18 @28735 has 22 MA's), (20, 28747), (21, 28759), (40, 28966), (44, 28999), (50, 29041),

Gene: Karhdo_33 Start: 28898, Stop: 29272, Start Num: 17
Candidate Starts for Karhdo_33:
(Start: 17 @28898 has 227 MA's), (Start: 18 @28901 has 22 MA's), (20, 28913), (21, 28925), (40, 29132), (44, 29165), (50, 29207),

Gene: Kenuha5_30 Start: 27876, Stop: 28250, Start Num: 17
Candidate Starts for Kenuha5_30:
(Start: 17 @27876 has 227 MA's), (20, 27891), (21, 27903), (40, 28110), (44, 28143),

Gene: Kersh_32 Start: 29972, Stop: 30346, Start Num: 17
Candidate Starts for Kersh_32:
(Start: 17 @29972 has 227 MA's), (Start: 18 @29975 has 22 MA's), (20, 29987), (21, 29999), (40, 30206), (44, 30239), (50, 30281),

Gene: Kevin1_29 Start: 24131, Stop: 24568, Start Num: 17
Candidate Starts for Kevin1_29:
(8, 23837), (10, 23963), (13, 24041), (Start: 17 @24131 has 227 MA's), (24, 24209), (31, 24260), (32, 24269), (40, 24371),

Gene: Kimberlium_35 Start: 29890, Stop: 30264, Start Num: 17
Candidate Starts for Kimberlium_35:
(Start: 17 @29890 has 227 MA's), (Start: 18 @29893 has 22 MA's), (20, 29905), (21, 29917), (25, 29977), (40, 30124), (43, 30154), (44, 30157), (50, 30199),

Gene: KingJulian_33 Start: 28960, Stop: 29334, Start Num: 17
Candidate Starts for KingJulian_33:
(Start: 17 @28960 has 227 MA's), (20, 28975), (21, 28987), (40, 29194), (44, 29227),

Gene: KingMidas_35 Start: 30629, Stop: 31003, Start Num: 17
Candidate Starts for KingMidas_35:
(Start: 17 @30629 has 227 MA's), (20, 30644), (21, 30656), (40, 30863), (44, 30896), (50, 30938),

Gene: Kingsley_32 Start: 28585, Stop: 28959, Start Num: 17
Candidate Starts for Kingsley_32:
(Start: 17 @28585 has 227 MA's), (Start: 18 @28588 has 22 MA's), (20, 28600), (21, 28612), (25, 28672), (40, 28819), (44, 28852),

Gene: Koella_27 Start: 24913, Stop: 25287, Start Num: 17
Candidate Starts for Koella_27:
(Start: 17 @24913 has 227 MA's), (20, 24928), (21, 24940), (40, 25147), (43, 25177), (44, 25180), (50, 25222),

Gene: Krakatau_34 Start: 29459, Stop: 29833, Start Num: 17
Candidate Starts for Krakatau_34:
(Start: 17 @29459 has 227 MA's), (Start: 18 @29462 has 22 MA's), (20, 29474), (21, 29486), (40, 29693), (44, 29726),

Gene: KristaRAM_34 Start: 29585, Stop: 29959, Start Num: 17
Candidate Starts for KristaRAM_34:
(Start: 17 @29585 has 227 MA's), (20, 29600), (21, 29612), (40, 29819), (44, 29852),

Gene: LastJedi_27 Start: 24944, Stop: 25318, Start Num: 17
Candidate Starts for LastJedi_27:
(Start: 17 @24944 has 227 MA's), (20, 24959), (21, 24971), (40, 25178), (43, 25208), (44, 25211), (50, 25253),

Gene: Latretium_34 Start: 29544, Stop: 29918, Start Num: 17
Candidate Starts for Latretium_34:
(Start: 17 @29544 has 227 MA's), (20, 29559), (21, 29571), (40, 29778), (44, 29811),

Gene: Leozinho_35 Start: 29187, Stop: 29561, Start Num: 17
Candidate Starts for Leozinho_35:
(Start: 17 @29187 has 227 MA's), (20, 29202), (21, 29214), (40, 29421), (44, 29454),

Gene: Leperchaun_33 Start: 28842, Stop: 29213, Start Num: 18
Candidate Starts for Leperchaun_33:
(Start: 17 @28839 has 227 MA's), (Start: 18 @28842 has 22 MA's), (20, 28854), (21, 28866), (40, 29073), (44, 29106), (50, 29148),

Gene: LilMoolah_33 Start: 29037, Stop: 29411, Start Num: 17
Candidate Starts for LilMoolah_33:
(Start: 17 @29037 has 227 MA's), (20, 29052), (21, 29064), (40, 29271), (43, 29301), (44, 29304), (50, 29346),

Gene: LittleShirley_36 Start: 30407, Stop: 30778, Start Num: 18
Candidate Starts for LittleShirley_36:
(Start: 17 @30404 has 227 MA's), (Start: 18 @30407 has 22 MA's), (20, 30419), (21, 30431), (40, 30638), (44, 30671),

Gene: Lizziana_33 Start: 28912, Stop: 29286, Start Num: 17
Candidate Starts for Lizziana_33:
(Start: 17 @28912 has 227 MA's), (20, 28927), (21, 28939), (40, 29146), (43, 29176), (44, 29179), (50, 29221),

Gene: Llama_33 Start: 28973, Stop: 29347, Start Num: 17
Candidate Starts for Llama_33:
(Start: 17 @28973 has 227 MA's), (Start: 18 @28976 has 22 MA's), (20, 28988), (21, 29000), (40, 29207), (43, 29237), (44, 29240), (50, 29282),

Gene: Llij_33 Start: 28744, Stop: 29118, Start Num: 17
Candidate Starts for Llij_33:
(Start: 17 @28744 has 227 MA's), (Start: 18 @28747 has 22 MA's), (20, 28759), (21, 28771), (40, 28978), (44, 29011), (50, 29053),

Gene: LordVader_28 Start: 23943, Stop: 24374, Start Num: 17
Candidate Starts for LordVader_28:
(10, 23775), (13, 23853), (Start: 17 @23943 has 227 MA's), (20, 23961), (23, 24018), (32, 24075), (36, 24135), (39, 24168), (42, 24198), (45, 24231),

Gene: Lorde_35 Start: 29001, Stop: 29375, Start Num: 17

Candidate Starts for Lorde_35:
(Start: 17 @29001 has 227 MA's), (31, 29130), (32, 29139), (40, 29235), (44, 29268),

Gene: Lucia_34 Start: 28875, Stop: 29249, Start Num: 17
Candidate Starts for Lucia_34:
(Start: 17 @28875 has 227 MA's), (Start: 18 @28878 has 22 MA's), (20, 28890), (21, 28902), (25, 28962), (40, 29109), (44, 29142), (50, 29184),

Gene: LunaBlu_36 Start: 29776, Stop: 30150, Start Num: 17
Candidate Starts for LunaBlu_36:
(Start: 17 @29776 has 227 MA's), (20, 29791), (21, 29803), (40, 30010), (44, 30043),

Gene: MadMen_31 Start: 28197, Stop: 28571, Start Num: 17
Candidate Starts for MadMen_31:
(Start: 17 @28197 has 227 MA's), (20, 28212), (21, 28224), (31, 28326), (40, 28431), (44, 28464),

Gene: Madiba_31 Start: 27677, Stop: 28048, Start Num: 18
Candidate Starts for Madiba_31:
(Start: 17 @27674 has 227 MA's), (Start: 18 @27677 has 22 MA's), (20, 27689), (21, 27701), (40, 27908), (44, 27941), (50, 27983),

Gene: Mahavrat_33 Start: 28804, Stop: 29178, Start Num: 17
Candidate Starts for Mahavrat_33:
(Start: 17 @28804 has 227 MA's), (Start: 18 @28807 has 22 MA's), (20, 28819), (21, 28831), (25, 28891), (40, 29038), (44, 29071), (50, 29113),

Gene: Mandlovu_34 Start: 29530, Stop: 29904, Start Num: 17
Candidate Starts for Mandlovu_34:
(Start: 17 @29530 has 227 MA's), (20, 29545), (21, 29557), (40, 29764), (44, 29797),

Gene: Mantra_33 Start: 28863, Stop: 29237, Start Num: 17
Candidate Starts for Mantra_33:
(Start: 17 @28863 has 227 MA's), (Start: 18 @28866 has 22 MA's), (20, 28878), (21, 28890), (40, 29097), (44, 29130),

Gene: Maravista_33 Start: 28694, Stop: 29068, Start Num: 17
Candidate Starts for Maravista_33:
(Start: 17 @28694 has 227 MA's), (20, 28709), (21, 28721), (40, 28928), (43, 28958), (44, 28961), (50, 29003),

Gene: Marker_34 Start: 28630, Stop: 29004, Start Num: 17
Candidate Starts for Marker_34:
(Start: 17 @28630 has 227 MA's), (19, 28636), (20, 28645), (21, 28657), (25, 28717), (40, 28864), (44, 28897),

Gene: Martik_33 Start: 28939, Stop: 29313, Start Num: 17
Candidate Starts for Martik_33:
(Start: 17 @28939 has 227 MA's), (20, 28954), (21, 28966), (40, 29173), (43, 29203), (44, 29206), (50, 29248),

Gene: Mattes_33 Start: 28953, Stop: 29327, Start Num: 17
Candidate Starts for Mattes_33:

(Start: 17 @28953 has 227 MA's), (Start: 18 @28956 has 22 MA's), (20, 28968), (21, 28980), (40, 29187), (44, 29220), (50, 29262),

Gene: Medindi_34 Start: 29341, Stop: 29715, Start Num: 17
Candidate Starts for Medindi_34:
(Start: 17 @29341 has 227 MA's), (20, 29356), (21, 29368), (40, 29575), (44, 29608),

Gene: Melissauren88_33 Start: 28906, Stop: 29280, Start Num: 17
Candidate Starts for Melissauren88_33:
(Start: 17 @28906 has 227 MA's), (20, 28921), (21, 28933), (40, 29140), (44, 29173),

Gene: MilanaBonita_27 Start: 24837, Stop: 25211, Start Num: 17
Candidate Starts for MilanaBonita_27:
(3, 24318), (Start: 17 @24837 has 227 MA's), (20, 24852), (21, 24864), (40, 25071), (44, 25104),

Gene: MilleniumForce_34 Start: 29698, Stop: 30072, Start Num: 17
Candidate Starts for MilleniumForce_34:
(Start: 17 @29698 has 227 MA's), (20, 29713), (21, 29725), (40, 29932), (44, 29965),

Gene: MinionDave_36 Start: 29935, Stop: 30309, Start Num: 17
Candidate Starts for MinionDave_36:
(Start: 17 @29935 has 227 MA's), (20, 29950), (21, 29962), (40, 30169), (44, 30202),

Gene: Minnie_35 Start: 29748, Stop: 30122, Start Num: 17
Candidate Starts for Minnie_35:
(Start: 17 @29748 has 227 MA's), (19, 29754), (20, 29763), (21, 29775), (25, 29835), (40, 29982), (44, 30015), (50, 30057),

Gene: Misha28_34 Start: 28648, Stop: 29022, Start Num: 17
Candidate Starts for Misha28_34:
(Start: 17 @28648 has 227 MA's), (20, 28663), (21, 28675), (25, 28735), (40, 28882), (44, 28915),

Gene: MisterCuddles_35 Start: 29802, Stop: 30176, Start Num: 17
Candidate Starts for MisterCuddles_35:
(Start: 17 @29802 has 227 MA's), (20, 29817), (21, 29829), (40, 30036), (44, 30069), (50, 30111),

Gene: ModicumRichard_32 Start: 27476, Stop: 27847, Start Num: 22
Candidate Starts for ModicumRichard_32:
(7, 27089), (14, 27401), (Start: 22 @27476 has 5 MA's), (27, 27545), (31, 27557), (33, 27578), (36, 27626),

Gene: Modragons_33 Start: 28818, Stop: 29192, Start Num: 17
Candidate Starts for Modragons_33:
(Start: 17 @28818 has 227 MA's), (Start: 18 @28821 has 22 MA's), (20, 28833), (21, 28845), (40, 29052), (43, 29082), (44, 29085), (50, 29127),

Gene: Moonbeam_34 Start: 29452, Stop: 29826, Start Num: 17
Candidate Starts for Moonbeam_34:
(Start: 17 @29452 has 227 MA's), (20, 29467), (21, 29479), (40, 29686), (44, 29719),

Gene: Morgana_32 Start: 27232, Stop: 27603, Start Num: 22
Candidate Starts for Morgana_32:
(14, 27157), (Start: 22 @27232 has 5 MA's), (27, 27301), (31, 27313), (33, 27334), (36, 27382),

Gene: Mova_34 Start: 28587, Stop: 28961, Start Num: 17
Candidate Starts for Mova_34:
(Start: 17 @28587 has 227 MA's), (20, 28602), (21, 28614), (40, 28821), (44, 28854),

Gene: Mozy_35 Start: 29643, Stop: 30017, Start Num: 17
Candidate Starts for Mozy_35:
(Start: 17 @29643 has 227 MA's), (Start: 18 @29646 has 22 MA's), (20, 29658), (21, 29670), (25, 29730), (40, 29877), (44, 29910), (50, 29952),

Gene: Ms6_27 Start: 24369, Stop: 24743, Start Num: 17
Candidate Starts for Ms6_27:
(Start: 17 @24369 has 227 MA's), (20, 24384), (21, 24396), (40, 24603), (44, 24636),

Gene: MulchExplorer_35 Start: 29892, Stop: 30263, Start Num: 18
Candidate Starts for MulchExplorer_35:
(Start: 17 @29889 has 227 MA's), (Start: 18 @29892 has 22 MA's), (20, 29904), (21, 29916), (25, 29976), (40, 30123), (43, 30153), (44, 30156), (50, 30198),

Gene: MulchSalad_30 Start: 25650, Stop: 26024, Start Num: 17
Candidate Starts for MulchSalad_30:
(Start: 17 @25650 has 227 MA's), (20, 25665), (21, 25677), (40, 25884), (44, 25917),

Gene: Mutaforma13_33 Start: 29022, Stop: 29396, Start Num: 17
Candidate Starts for Mutaforma13_33:
(Start: 17 @29022 has 227 MA's), (Start: 18 @29025 has 22 MA's), (20, 29037), (21, 29049), (40, 29256), (44, 29289), (50, 29331),

Gene: Nenae_27 Start: 23790, Stop: 24299, Start Num: 15
Candidate Starts for Nenae_27:
(1, 23220), (Start: 15 @23790 has 12 MA's), (28, 23916), (32, 23934), (38, 24009), (40, 24036), (42, 24057), (46, 24120), (49, 24189),

Gene: NewHope4_37 Start: 29578, Stop: 29952, Start Num: 17
Candidate Starts for NewHope4_37:
(Start: 17 @29578 has 227 MA's), (20, 29593), (21, 29605), (40, 29812), (44, 29845),

Gene: Nichirin_33 Start: 29005, Stop: 29376, Start Num: 18
Candidate Starts for Nichirin_33:
(Start: 17 @29002 has 227 MA's), (Start: 18 @29005 has 22 MA's), (20, 29017), (21, 29029), (40, 29236), (44, 29269), (50, 29311),

Gene: Nimbo_33 Start: 28770, Stop: 29144, Start Num: 17
Candidate Starts for Nimbo_33:
(Start: 17 @28770 has 227 MA's), (20, 28785), (21, 28797), (40, 29004), (44, 29037), (50, 29079),

Gene: Nitzel_34 Start: 29486, Stop: 29860, Start Num: 17
Candidate Starts for Nitzel_34:
(Start: 17 @29486 has 227 MA's), (Start: 18 @29489 has 22 MA's), (20, 29501), (21, 29513), (40, 29720), (44, 29753),

Gene: Nivrat_33 Start: 28911, Stop: 29285, Start Num: 17
Candidate Starts for Nivrat_33:

(Start: 17 @28911 has 227 MA's), (20, 28926), (21, 28938), (40, 29145), (43, 29175), (44, 29178), (50, 29220),

Gene: NormanBulbieJr_33 Start: 28926, Stop: 29300, Start Num: 17
Candidate Starts for NormanBulbieJr_33:
(Start: 17 @28926 has 227 MA's), (20, 28941), (21, 28953), (40, 29160), (43, 29190), (44, 29193), (50, 29235),

Gene: ObLaDi_32 Start: 27455, Stop: 27826, Start Num: 22
Candidate Starts for ObLaDi_32:
(7, 27068), (14, 27380), (Start: 22 @27455 has 5 MA's), (27, 27524), (31, 27536), (33, 27557), (36, 27605),

Gene: Ochi17_31 Start: 28425, Stop: 28799, Start Num: 17
Candidate Starts for Ochi17_31:
(Start: 17 @28425 has 227 MA's), (Start: 18 @28428 has 22 MA's), (20, 28440), (21, 28452), (40, 28659), (43, 28689), (44, 28692), (50, 28734),

Gene: OfUltron_33 Start: 28977, Stop: 29348, Start Num: 18
Candidate Starts for OfUltron_33:
(Start: 17 @28974 has 227 MA's), (Start: 18 @28977 has 22 MA's), (20, 28989), (21, 29001), (40, 29208), (43, 29238), (44, 29241), (50, 29283),

Gene: Ogopogo_33 Start: 28118, Stop: 28492, Start Num: 17
Candidate Starts for Ogopogo_33:
(Start: 17 @28118 has 227 MA's), (Start: 18 @28121 has 22 MA's), (20, 28133), (21, 28145), (25, 28205), (40, 28352), (43, 28382), (44, 28385), (50, 28427),

Gene: Okabe_34 Start: 25812, Stop: 26186, Start Num: 17
Candidate Starts for Okabe_34:
(Start: 17 @25812 has 227 MA's), (19, 25818), (20, 25827), (21, 25839), (25, 25899), (40, 26046), (44, 26079), (50, 26121),

Gene: Oksu_34 Start: 28821, Stop: 29192, Start Num: 18
Candidate Starts for Oksu_34:
(Start: 17 @28818 has 227 MA's), (Start: 18 @28821 has 22 MA's), (20, 28833), (21, 28845), (40, 29052), (43, 29082), (44, 29085), (50, 29127),

Gene: OldBen_33 Start: 28801, Stop: 29175, Start Num: 17
Candidate Starts for OldBen_33:
(Start: 17 @28801 has 227 MA's), (20, 28816), (21, 28828), (40, 29035), (44, 29068), (50, 29110),

Gene: OlympiaSaint_33 Start: 29215, Stop: 29589, Start Num: 17
Candidate Starts for OlympiaSaint_33:
(Start: 17 @29215 has 227 MA's), (Start: 18 @29218 has 22 MA's), (20, 29230), (21, 29242), (40, 29449), (44, 29482), (50, 29524),

Gene: Ovechkin_34 Start: 29774, Stop: 30148, Start Num: 17
Candidate Starts for Ovechkin_34:
(Start: 17 @29774 has 227 MA's), (Start: 18 @29777 has 22 MA's), (20, 29789), (21, 29801), (25, 29861), (40, 30008), (44, 30041), (50, 30083),

Gene: OwlsT2W_34 Start: 29190, Stop: 29564, Start Num: 17

Candidate Starts for OwlsT2W_34:
(Start: 17 @29190 has 227 MA's), (20, 29205), (21, 29217), (40, 29424), (44, 29457),

Gene: PHappiness_33 Start: 28743, Stop: 29117, Start Num: 17
Candidate Starts for PHappiness_33:
(Start: 17 @28743 has 227 MA's), (20, 28758), (21, 28770), (40, 28977), (44, 29010), (50, 29052),

Gene: PMC_33 Start: 28744, Stop: 29118, Start Num: 17
Candidate Starts for PMC_33:
(Start: 17 @28744 has 227 MA's), (Start: 18 @28747 has 22 MA's), (20, 28759), (21, 28771), (40, 28978), (44, 29011), (50, 29053),

Gene: Pacc40_33 Start: 28935, Stop: 29309, Start Num: 17
Candidate Starts for Pacc40_33:
(Start: 17 @28935 has 227 MA's), (Start: 18 @28938 has 22 MA's), (20, 28950), (21, 28962), (40, 29169), (44, 29202), (50, 29244),

Gene: PaintedDog_32 Start: 27272, Stop: 27640, Start Num: 18
Candidate Starts for PaintedDog_32:
(Start: 17 @27269 has 227 MA's), (Start: 18 @27272 has 22 MA's), (37, 27470), (38, 27473), (44, 27527),

Gene: Panchino_27 Start: 23750, Stop: 24223, Start Num: 15
Candidate Starts for Panchino_27:
(1, 23186), (5, 23345), (6, 23372), (Start: 15 @23750 has 12 MA's), (28, 23876), (40, 23996), (42, 24017), (46, 24080), (48, 24122),

Gene: PatoPoderoso_33 Start: 28960, Stop: 29334, Start Num: 17
Candidate Starts for PatoPoderoso_33:
(Start: 17 @28960 has 227 MA's), (20, 28975), (21, 28987), (40, 29194), (44, 29227),

Gene: Peridot_36 Start: 30266, Stop: 30637, Start Num: 18
Candidate Starts for Peridot_36:
(Start: 17 @30263 has 227 MA's), (Start: 18 @30266 has 22 MA's), (20, 30278), (21, 30290), (40, 30497), (44, 30530),

Gene: Phalconet_33 Start: 28872, Stop: 29246, Start Num: 17
Candidate Starts for Phalconet_33:
(Start: 17 @28872 has 227 MA's), (20, 28887), (21, 28899), (40, 29106), (44, 29139),

Gene: PhancyPhin_27 Start: 23787, Stop: 24296, Start Num: 15
Candidate Starts for PhancyPhin_27:
(1, 23217), (Start: 15 @23787 has 12 MA's), (28, 23913), (32, 23931), (38, 24006), (40, 24033), (42, 24054), (46, 24117), (49, 24186),

Gene: Phanphagia_30 Start: 27895, Stop: 28269, Start Num: 17
Candidate Starts for Phanphagia_30:
(Start: 17 @27895 has 227 MA's), (20, 27910), (21, 27922), (40, 28129), (44, 28162),

Gene: Phasih_34 Start: 29321, Stop: 29695, Start Num: 17
Candidate Starts for Phasih_34:
(Start: 17 @29321 has 227 MA's), (19, 29327), (20, 29336), (21, 29348), (40, 29555), (44, 29588), (50, 29630),

Gene: Phatniss_34 Start: 29261, Stop: 29635, Start Num: 17
Candidate Starts for Phatniss_34:
(Start: 17 @29261 has 227 MA's), (Start: 18 @29264 has 22 MA's), (20, 29276), (21, 29288), (40, 29495), (44, 29528), (50, 29570),

Gene: PhesterPhotato_33 Start: 28792, Stop: 29166, Start Num: 17
Candidate Starts for PhesterPhotato_33:
(2, 28270), (3, 28273), (4, 28309), (Start: 17 @28792 has 227 MA's), (20, 28807), (21, 28819), (40, 29026), (44, 29059),

Gene: Philonius_30 Start: 24731, Stop: 25099, Start Num: 16
Candidate Starts for Philonius_30:
(Start: 16 @24731 has 15 MA's), (38, 24929), (40, 24950),

Gene: Philus_33 Start: 28838, Stop: 29212, Start Num: 17
Candidate Starts for Philus_33:
(Start: 17 @28838 has 227 MA's), (Start: 18 @28841 has 22 MA's), (20, 28853), (21, 28865), (40, 29072), (44, 29105), (50, 29147),

Gene: PhlipPhlop_34 Start: 30379, Stop: 30750, Start Num: 18
Candidate Starts for PhlipPhlop_34:
(Start: 17 @30376 has 227 MA's), (Start: 18 @30379 has 22 MA's), (20, 30391), (21, 30403), (40, 30610), (44, 30643), (50, 30685),

Gene: Phrann_28 Start: 24634, Stop: 24999, Start Num: 17
Candidate Starts for Phrann_28:
(Start: 17 @24634 has 227 MA's), (Start: 18 @24637 has 22 MA's), (30, 24757), (37, 24835), (38, 24838),

Gene: Piper2020_35 Start: 29364, Stop: 29738, Start Num: 17
Candidate Starts for Piper2020_35:
(Start: 17 @29364 has 227 MA's), (19, 29370), (20, 29379), (21, 29391), (40, 29598), (44, 29631), (51, 29685),

Gene: Pippy_27 Start: 24902, Stop: 25276, Start Num: 17
Candidate Starts for Pippy_27:
(Start: 17 @24902 has 227 MA's), (20, 24917), (21, 24929), (40, 25136), (43, 25166), (44, 25169), (50, 25211),

Gene: Plumbus_35 Start: 28841, Stop: 29215, Start Num: 17
Candidate Starts for Plumbus_35:
(Start: 17 @28841 has 227 MA's), (20, 28856), (21, 28868), (40, 29075), (44, 29108),

Gene: Poenanya_33 Start: 28884, Stop: 29258, Start Num: 17
Candidate Starts for Poenanya_33:
(Start: 17 @28884 has 227 MA's), (19, 28890), (20, 28899), (21, 28911), (40, 29118), (44, 29151),

Gene: Polka14_34 Start: 29387, Stop: 29761, Start Num: 17
Candidate Starts for Polka14_34:
(Start: 17 @29387 has 227 MA's), (19, 29393), (20, 29402), (21, 29414), (40, 29621), (44, 29654), (50, 29696),

Gene: Pollywog_33 Start: 29096, Stop: 29470, Start Num: 17
Candidate Starts for Pollywog_33:
(11, 28976), (Start: 17 @29096 has 227 MA's), (Start: 18 @29099 has 22 MA's), (20, 29111), (21, 29123), (40, 29330), (44, 29363),

Gene: Polo2Bam_38 Start: 28943, Stop: 29317, Start Num: 17
Candidate Starts for Polo2Bam_38:
(Start: 17 @28943 has 227 MA's), (Start: 18 @28946 has 22 MA's), (20, 28958), (21, 28970), (25, 29030), (40, 29177), (44, 29210),

Gene: PopTart_33 Start: 29077, Stop: 29451, Start Num: 17
Candidate Starts for PopTart_33:
(Start: 17 @29077 has 227 MA's), (20, 29092), (21, 29104), (40, 29311), (44, 29344),

Gene: Priscilla_33 Start: 29024, Stop: 29398, Start Num: 17
Candidate Starts for Priscilla_33:
(Start: 17 @29024 has 227 MA's), (20, 29039), (21, 29051), (40, 29258), (43, 29288), (44, 29291), (50, 29333),

Gene: Purgamenstris_27 Start: 23790, Stop: 24299, Start Num: 15
Candidate Starts for Purgamenstris_27:
(1, 23220), (Start: 15 @23790 has 12 MA's), (28, 23916), (32, 23934), (38, 24009), (40, 24036), (42, 24057), (46, 24120), (49, 24189),

Gene: Purky_28 Start: 25121, Stop: 25498, Start Num: 16
Candidate Starts for Purky_28:
(Start: 16 @25121 has 15 MA's), (29, 25244), (30, 25250), (50, 25427),

Gene: QuickMath_34 Start: 30113, Stop: 30487, Start Num: 17
Candidate Starts for QuickMath_34:
(Start: 17 @30113 has 227 MA's), (Start: 18 @30116 has 22 MA's), (20, 30128), (21, 30140), (25, 30200), (40, 30347), (43, 30377), (44, 30380), (50, 30422),

Gene: Quico_34 Start: 28573, Stop: 28947, Start Num: 17
Candidate Starts for Quico_34:
(Start: 17 @28573 has 227 MA's), (Start: 18 @28576 has 22 MA's), (20, 28588), (21, 28600), (40, 28807), (44, 28840), (50, 28882),

Gene: Radiance_33 Start: 28937, Stop: 29311, Start Num: 17
Candidate Starts for Radiance_33:
(Start: 17 @28937 has 227 MA's), (Start: 18 @28940 has 22 MA's), (20, 28952), (21, 28964), (40, 29171), (44, 29204), (50, 29246),

Gene: Ramsey_36 Start: 29600, Stop: 29971, Start Num: 18
Candidate Starts for Ramsey_36:
(Start: 17 @29597 has 227 MA's), (Start: 18 @29600 has 22 MA's), (20, 29612), (21, 29624), (25, 29684), (40, 29831), (44, 29864), (50, 29906),

Gene: Raymond7_27 Start: 24117, Stop: 24518, Start Num: 15
Candidate Starts for Raymond7_27:
(1, 23547), (Start: 15 @24117 has 12 MA's), (28, 24243), (40, 24363),

Gene: RedBird_33 Start: 28742, Stop: 29116, Start Num: 17

Candidate Starts for RedBird_33:
(Start: 17 @28742 has 227 MA's), (19, 28748), (20, 28757), (21, 28769), (40, 28976), (44, 29009), (50, 29051),

Gene: Redi_27 Start: 23790, Stop: 24299, Start Num: 15
Candidate Starts for Redi_27:
(1, 23220), (Start: 15 @23790 has 12 MA's), (28, 23916), (32, 23934), (38, 24009), (40, 24036), (42, 24057), (46, 24120), (49, 24189),

Gene: Renaud18_33 Start: 28962, Stop: 29336, Start Num: 17
Candidate Starts for Renaud18_33:
(Start: 17 @28962 has 227 MA's), (20, 28977), (21, 28989), (40, 29196), (44, 29229),

Gene: Rialto_37 Start: 31095, Stop: 31469, Start Num: 17
Candidate Starts for Rialto_37:
(Start: 17 @31095 has 227 MA's), (Start: 18 @31098 has 22 MA's), (20, 31110), (21, 31122), (40, 31329), (44, 31362),

Gene: Rita_34 Start: 29011, Stop: 29385, Start Num: 17
Candidate Starts for Rita_34:
(Start: 17 @29011 has 227 MA's), (19, 29017), (20, 29026), (21, 29038), (40, 29245), (44, 29278),

Gene: RitaG_34 Start: 29207, Stop: 29581, Start Num: 17
Candidate Starts for RitaG_34:
(Start: 17 @29207 has 227 MA's), (Start: 18 @29210 has 22 MA's), (20, 29222), (21, 29234), (25, 29294), (40, 29441), (44, 29474), (50, 29516),

Gene: Rockne_33 Start: 28744, Stop: 29118, Start Num: 17
Candidate Starts for Rockne_33:
(Start: 17 @28744 has 227 MA's), (Start: 18 @28747 has 22 MA's), (20, 28759), (21, 28771), (40, 28978), (44, 29011), (50, 29053),

Gene: RockyHorror_34 Start: 28688, Stop: 29062, Start Num: 17
Candidate Starts for RockyHorror_34:
(Start: 17 @28688 has 227 MA's), (19, 28694), (20, 28703), (21, 28715), (40, 28922), (44, 28955),

Gene: Royals2015_33 Start: 28861, Stop: 29235, Start Num: 17
Candidate Starts for Royals2015_33:
(Start: 17 @28861 has 227 MA's), (Start: 18 @28864 has 22 MA's), (20, 28876), (21, 28888), (40, 29095), (44, 29128), (50, 29170),

Gene: Rubeelu_29 Start: 24134, Stop: 24508, Start Num: 17
Candidate Starts for Rubeelu_29:
(10, 23966), (13, 24044), (Start: 17 @24134 has 227 MA's), (28, 24251),

Gene: Ruby_35 Start: 29802, Stop: 30176, Start Num: 17
Candidate Starts for Ruby_35:
(Start: 17 @29802 has 227 MA's), (20, 29817), (21, 29829), (40, 30036), (44, 30069), (50, 30111),

Gene: SG4_34 Start: 29511, Stop: 29885, Start Num: 17
Candidate Starts for SG4_34:
(Start: 17 @29511 has 227 MA's), (31, 29640), (32, 29649), (40, 29745), (44, 29778),

Gene: Saal_33 Start: 28816, Stop: 29190, Start Num: 17
Candidate Starts for Saal_33:
(Start: 17 @28816 has 227 MA's), (Start: 18 @28819 has 22 MA's), (20, 28831), (21, 28843), (40, 29050), (44, 29083), (50, 29125),

Gene: Sabbb_34 Start: 29161, Stop: 29535, Start Num: 17
Candidate Starts for Sabbb_34:
(Start: 17 @29161 has 227 MA's), (19, 29167), (20, 29176), (21, 29188), (40, 29395), (44, 29428),

Gene: Sandalphon_34 Start: 29545, Stop: 29919, Start Num: 17
Candidate Starts for Sandalphon_34:
(Start: 17 @29545 has 227 MA's), (19, 29551), (20, 29560), (21, 29572), (40, 29779), (44, 29812),

Gene: Sarma624_29 Start: 24971, Stop: 25345, Start Num: 17
Candidate Starts for Sarma624_29:
(Start: 17 @24971 has 227 MA's), (19, 24977), (20, 24986), (21, 24998), (40, 25205), (44, 25238),

Gene: Sassafras_34 Start: 29446, Stop: 29820, Start Num: 17
Candidate Starts for Sassafras_34:
(Start: 17 @29446 has 227 MA's), (19, 29452), (20, 29461), (21, 29473), (40, 29680), (44, 29713), (50, 29755),

Gene: SassyB_33 Start: 29077, Stop: 29451, Start Num: 17
Candidate Starts for SassyB_33:
(Start: 17 @29077 has 227 MA's), (20, 29092), (21, 29104), (40, 29311), (44, 29344),

Gene: Scitech_27 Start: 23917, Stop: 24285, Start Num: 16
Candidate Starts for Scitech_27:
(Start: 16 @23917 has 15 MA's), (26, 24010), (29, 24028), (38, 24115), (40, 24136),

Gene: Scottish_34 Start: 30067, Stop: 30441, Start Num: 17
Candidate Starts for Scottish_34:
(Start: 17 @30067 has 227 MA's), (19, 30073), (20, 30082), (21, 30094), (40, 30301), (44, 30334), (50, 30376),

Gene: SeaLumen_37 Start: 28943, Stop: 29317, Start Num: 17
Candidate Starts for SeaLumen_37:
(Start: 17 @28943 has 227 MA's), (Start: 18 @28946 has 22 MA's), (20, 28958), (21, 28970), (25, 29030), (40, 29177), (44, 29210),

Gene: Seabastian_33 Start: 28977, Stop: 29348, Start Num: 18
Candidate Starts for Seabastian_33:
(Start: 17 @28974 has 227 MA's), (Start: 18 @28977 has 22 MA's), (20, 28989), (21, 29001), (40, 29208), (43, 29238), (44, 29241), (50, 29283),

Gene: Seagreen_34 Start: 28884, Stop: 29258, Start Num: 17
Candidate Starts for Seagreen_34:
(Start: 17 @28884 has 227 MA's), (Start: 18 @28887 has 22 MA's), (20, 28899), (21, 28911), (40, 29118), (44, 29151), (50, 29193),

Gene: Shauna1_30 Start: 27898, Stop: 28272, Start Num: 17
Candidate Starts for Shauna1_30:
(Start: 17 @27898 has 227 MA's), (20, 27913), (21, 27925), (40, 28132), (44, 28165),

Gene: ShiLan_33 Start: 28980, Stop: 29354, Start Num: 17
Candidate Starts for ShiLan_33:
(Start: 17 @28980 has 227 MA's), (20, 28995), (21, 29007), (40, 29214), (43, 29244), (44, 29247), (50, 29289),

Gene: ShowerHandel_33 Start: 28939, Stop: 29313, Start Num: 17
Candidate Starts for ShowerHandel_33:
(Start: 17 @28939 has 227 MA's), (20, 28954), (21, 28966), (40, 29173), (43, 29203), (44, 29206), (50, 29248),

Gene: ShrimpFriedEgg_27 Start: 23790, Stop: 24299, Start Num: 15
Candidate Starts for ShrimpFriedEgg_27:
(1, 23220), (Start: 15 @23790 has 12 MA's), (28, 23916), (32, 23934), (38, 24009), (40, 24036), (42, 24057), (46, 24120), (49, 24189),

Gene: ShroomBoi_30 Start: 27837, Stop: 28211, Start Num: 17
Candidate Starts for ShroomBoi_30:
(Start: 17 @27837 has 227 MA's), (Start: 18 @27840 has 22 MA's), (20, 27852), (21, 27864), (40, 28071), (44, 28104), (50, 28146),

Gene: SiSi_33 Start: 28745, Stop: 29119, Start Num: 17
Candidate Starts for SiSi_33:
(Start: 17 @28745 has 227 MA's), (19, 28751), (20, 28760), (21, 28772), (40, 28979), (44, 29012), (50, 29054),

Gene: SilverChicken_41 Start: 28663, Stop: 29037, Start Num: 17
Candidate Starts for SilverChicken_41:
(Start: 17 @28663 has 227 MA's), (20, 28678), (21, 28690), (40, 28897), (44, 28930),

Gene: Silvy_30 Start: 24741, Stop: 25109, Start Num: 16
Candidate Starts for Silvy_30:
(Start: 16 @24741 has 15 MA's), (26, 24834), (29, 24852), (38, 24939), (40, 24960),

Gene: SkinnyPete_27 Start: 23780, Stop: 24148, Start Num: 16
Candidate Starts for SkinnyPete_27:
(Start: 16 @23780 has 15 MA's), (26, 23873), (29, 23891), (38, 23978), (40, 23999),

Gene: Slim_35 Start: 30136, Stop: 30510, Start Num: 17
Candidate Starts for Slim_35:
(Start: 17 @30136 has 227 MA's), (19, 30142), (20, 30151), (21, 30163), (40, 30370), (44, 30403), (50, 30445),

Gene: Soul22_38 Start: 29141, Stop: 29515, Start Num: 17
Candidate Starts for Soul22_38:
(Start: 17 @29141 has 227 MA's), (19, 29147), (20, 29156), (21, 29168), (25, 29228), (40, 29375), (44, 29408),

Gene: Sparkdehlily_33 Start: 28862, Stop: 29236, Start Num: 17
Candidate Starts for Sparkdehlily_33:
(Start: 17 @28862 has 227 MA's), (Start: 18 @28865 has 22 MA's), (20, 28877), (21, 28889), (40, 29096), (44, 29129), (50, 29171),

Gene: Spartacus_35 Start: 29272, Stop: 29646, Start Num: 17
Candidate Starts for Spartacus_35:
(Start: 17 @29272 has 227 MA's), (Start: 18 @29275 has 22 MA's), (20, 29287), (21, 29299), (40, 29506), (43, 29536), (44, 29539), (50, 29581),

Gene: Spikelee_35 Start: 29010, Stop: 29384, Start Num: 17
Candidate Starts for Spikelee_35:
(Start: 17 @29010 has 227 MA's), (19, 29016), (20, 29025), (21, 29037), (40, 29244), (44, 29277), (50, 29319),

Gene: Spinach_27 Start: 23790, Stop: 24299, Start Num: 15
Candidate Starts for Spinach_27:
(1, 23220), (Start: 15 @23790 has 12 MA's), (28, 23916), (32, 23934), (38, 24009), (40, 24036), (42, 24057), (46, 24120), (49, 24189),

Gene: Spoonbill_33 Start: 29026, Stop: 29400, Start Num: 17
Candidate Starts for Spoonbill_33:
(Start: 17 @29026 has 227 MA's), (Start: 18 @29029 has 22 MA's), (20, 29041), (21, 29053), (40, 29260), (44, 29293), (50, 29335),

Gene: StAnnes_32 Start: 29341, Stop: 29715, Start Num: 17
Candidate Starts for StAnnes_32:
(Start: 17 @29341 has 227 MA's), (19, 29347), (20, 29356), (21, 29368), (40, 29575), (44, 29608),

Gene: Stap_34 Start: 28918, Stop: 29292, Start Num: 17
Candidate Starts for Stap_34:
(Start: 17 @28918 has 227 MA's), (20, 28933), (21, 28945), (40, 29152), (44, 29185), (50, 29227),

Gene: Starcevich_37 Start: 29640, Stop: 30014, Start Num: 17
Candidate Starts for Starcevich_37:
(Start: 17 @29640 has 227 MA's), (20, 29655), (21, 29667), (40, 29874), (44, 29907), (50, 29949),

Gene: Strokeseat_34 Start: 29587, Stop: 29961, Start Num: 17
Candidate Starts for Strokeseat_34:
(Start: 17 @29587 has 227 MA's), (20, 29602), (21, 29614), (40, 29821), (44, 29854),

Gene: SuperGrey_34 Start: 29733, Stop: 30107, Start Num: 17
Candidate Starts for SuperGrey_34:
(Start: 17 @29733 has 227 MA's), (20, 29748), (21, 29760), (40, 29967), (44, 30000),

Gene: SwagPigglett_33 Start: 28750, Stop: 29124, Start Num: 17
Candidate Starts for SwagPigglett_33:
(Start: 17 @28750 has 227 MA's), (20, 28765), (21, 28777), (40, 28984), (43, 29014), (44, 29017), (50, 29059),

Gene: TDanisky_33 Start: 28862, Stop: 29236, Start Num: 17
Candidate Starts for TDanisky_33:
(Start: 17 @28862 has 227 MA's), (Start: 18 @28865 has 22 MA's), (20, 28877), (21, 28889), (40, 29096), (44, 29129), (50, 29171),

Gene: TPA4_34 Start: 30182, Stop: 30700, Start Num: 17
Candidate Starts for TPA4_34:

(9, 29915), (12, 30071), (Start: 17 @30182 has 227 MA's), (34, 30368), (37, 30401), (45, 30488), (47, 30530), (50, 30572), (52, 30614), (53, 30626), (54, 30635), (55, 30692),

Gene: Taj_33 Start: 28923, Stop: 29297, Start Num: 17
Candidate Starts for Taj_33:
(Start: 17 @28923 has 227 MA's), (20, 28938), (21, 28950), (40, 29157), (44, 29190), (50, 29232),

Gene: Tapioca_30 Start: 24740, Stop: 25108, Start Num: 16
Candidate Starts for Tapioca_30:
(Start: 16 @24740 has 15 MA's), (38, 24938), (40, 24959),

Gene: Tchotchke_33 Start: 28368, Stop: 28739, Start Num: 18
Candidate Starts for Tchotchke_33:
(Start: 17 @28365 has 227 MA's), (Start: 18 @28368 has 22 MA's), (20, 28380), (21, 28392), (25, 28452), (40, 28599), (44, 28632), (50, 28674),

Gene: TootsiePop_34 Start: 28648, Stop: 29022, Start Num: 17
Candidate Starts for TootsiePop_34:
(Start: 17 @28648 has 227 MA's), (20, 28663), (21, 28675), (25, 28735), (40, 28882), (44, 28915),

Gene: Tootsieroll_34 Start: 28814, Stop: 29188, Start Num: 17
Candidate Starts for Tootsieroll_34:
(Start: 17 @28814 has 227 MA's), (19, 28820), (20, 28829), (21, 28841), (40, 29048), (43, 29078), (44, 29081),

Gene: Tortellini_28 Start: 25473, Stop: 25922, Start Num: 15
Candidate Starts for Tortellini_28:
(5, 25074), (6, 25101), (Start: 15 @25473 has 12 MA's), (23, 25554), (32, 25611), (36, 25671), (39, 25704), (42, 25734),

Gene: Tortoise12_30 Start: 24740, Stop: 25120, Start Num: 16
Candidate Starts for Tortoise12_30:
(Start: 16 @24740 has 15 MA's), (29, 24863), (38, 24950), (40, 24971),

Gene: Totinger_34 Start: 28746, Stop: 29120, Start Num: 17
Candidate Starts for Totinger_34:
(Start: 17 @28746 has 227 MA's), (Start: 18 @28749 has 22 MA's), (20, 28761), (21, 28773), (40, 28980), (44, 29013),

Gene: Tweety_33 Start: 28981, Stop: 29355, Start Num: 17
Candidate Starts for Tweety_33:
(Start: 17 @28981 has 227 MA's), (20, 28996), (21, 29008), (40, 29215), (44, 29248),

Gene: UncleRicky_36 Start: 30077, Stop: 30451, Start Num: 17
Candidate Starts for UncleRicky_36:
(Start: 17 @30077 has 227 MA's), (Start: 18 @30080 has 22 MA's), (20, 30092), (21, 30104), (40, 30311), (44, 30344), (50, 30386),

Gene: VRedHorse_33 Start: 28935, Stop: 29309, Start Num: 17
Candidate Starts for VRedHorse_33:
(Start: 17 @28935 has 227 MA's), (20, 28950), (21, 28962), (40, 29169), (44, 29202),

Gene: Velveteen_29 Start: 24971, Stop: 25345, Start Num: 17

Candidate Starts for Velveteen_29:
(Start: 17 @24971 has 227 MA's), (19, 24977), (20, 24986), (21, 24998), (40, 25205), (44, 25238),

Gene: Veteran_33 Start: 28784, Stop: 29158, Start Num: 17
Candidate Starts for Veteran_33:
(Start: 17 @28784 has 227 MA's), (19, 28790), (20, 28799), (21, 28811), (40, 29018), (44, 29051), (50, 29093),

Gene: Violac_34 Start: 29466, Stop: 29840, Start Num: 17
Candidate Starts for Violac_34:
(Start: 17 @29466 has 227 MA's), (20, 29481), (21, 29493), (40, 29700), (44, 29733),

Gene: Vivum_34 Start: 28762, Stop: 29136, Start Num: 17
Candidate Starts for Vivum_34:
(Start: 17 @28762 has 227 MA's), (20, 28777), (21, 28789), (31, 28891), (40, 28996), (44, 29029), (50, 29071),

Gene: WST1_28 Start: 22626, Stop: 23003, Start Num: 16
Candidate Starts for WST1_28:
(Start: 16 @22626 has 15 MA's), (29, 22749), (30, 22755), (50, 22932),

Gene: Wachhund_33 Start: 28938, Stop: 29312, Start Num: 17
Candidate Starts for Wachhund_33:
(Start: 17 @28938 has 227 MA's), (20, 28953), (21, 28965), (40, 29172), (44, 29205),

Gene: Wee_34 Start: 29461, Stop: 29835, Start Num: 17
Candidate Starts for Wee_34:
(Start: 17 @29461 has 227 MA's), (20, 29476), (21, 29488), (40, 29695), (44, 29728), (50, 29770),

Gene: Whatsapiecost_34 Start: 29197, Stop: 29571, Start Num: 17
Candidate Starts for Whatsapiecost_34:
(Start: 17 @29197 has 227 MA's), (20, 29212), (21, 29224), (40, 29431), (44, 29464),

Gene: Whouxphf_34 Start: 29255, Stop: 29629, Start Num: 17
Candidate Starts for Whouxphf_34:
(Start: 17 @29255 has 227 MA's), (20, 29270), (21, 29282), (40, 29489), (44, 29522), (50, 29564),

Gene: WillSterrel_35 Start: 30386, Stop: 30760, Start Num: 17
Candidate Starts for WillSterrel_35:
(Start: 17 @30386 has 227 MA's), (Start: 18 @30389 has 22 MA's), (20, 30401), (21, 30413), (40, 30620), (43, 30650), (44, 30653), (50, 30695),

Gene: Willsammy_28 Start: 25140, Stop: 25586, Start Num: 15
Candidate Starts for Willsammy_28:
(Start: 15 @25140 has 12 MA's), (23, 25221), (32, 25278), (36, 25338), (39, 25371), (42, 25401),

Gene: XFactor_33 Start: 28942, Stop: 29316, Start Num: 17
Candidate Starts for XFactor_33:
(Start: 17 @28942 has 227 MA's), (Start: 18 @28945 has 22 MA's), (20, 28957), (21, 28969), (40, 29176), (44, 29209),

Gene: Xavia_29 Start: 26111, Stop: 26473, Start Num: 17
Candidate Starts for Xavia_29:

(Start: 17 @26111 has 227 MA's), (Start: 18 @26114 has 22 MA's), (30, 26234), (37, 26312), (38, 26315),

Gene: Xeno_29 Start: 24506, Stop: 24874, Start Num: 16
Candidate Starts for Xeno_29:
(Start: 16 @24506 has 15 MA's), (26, 24599), (29, 24617), (38, 24704), (40, 24725),

Gene: Yorick_33 Start: 28937, Stop: 29311, Start Num: 17
Candidate Starts for Yorick_33:
(Start: 17 @28937 has 227 MA's), (20, 28952), (21, 28964), (40, 29171), (43, 29201), (44, 29204), (50, 29246),

Gene: Zerg_33 Start: 28797, Stop: 29171, Start Num: 17
Candidate Starts for Zerg_33:
(Start: 17 @28797 has 227 MA's), (19, 28803), (20, 28812), (21, 28824), (40, 29031), (44, 29064),

Gene: Zizzle_33 Start: 28881, Stop: 29255, Start Num: 17
Candidate Starts for Zizzle_33:
(Start: 17 @28881 has 227 MA's), (20, 28896), (21, 28908), (40, 29115), (43, 29145), (44, 29148), (50, 29190),