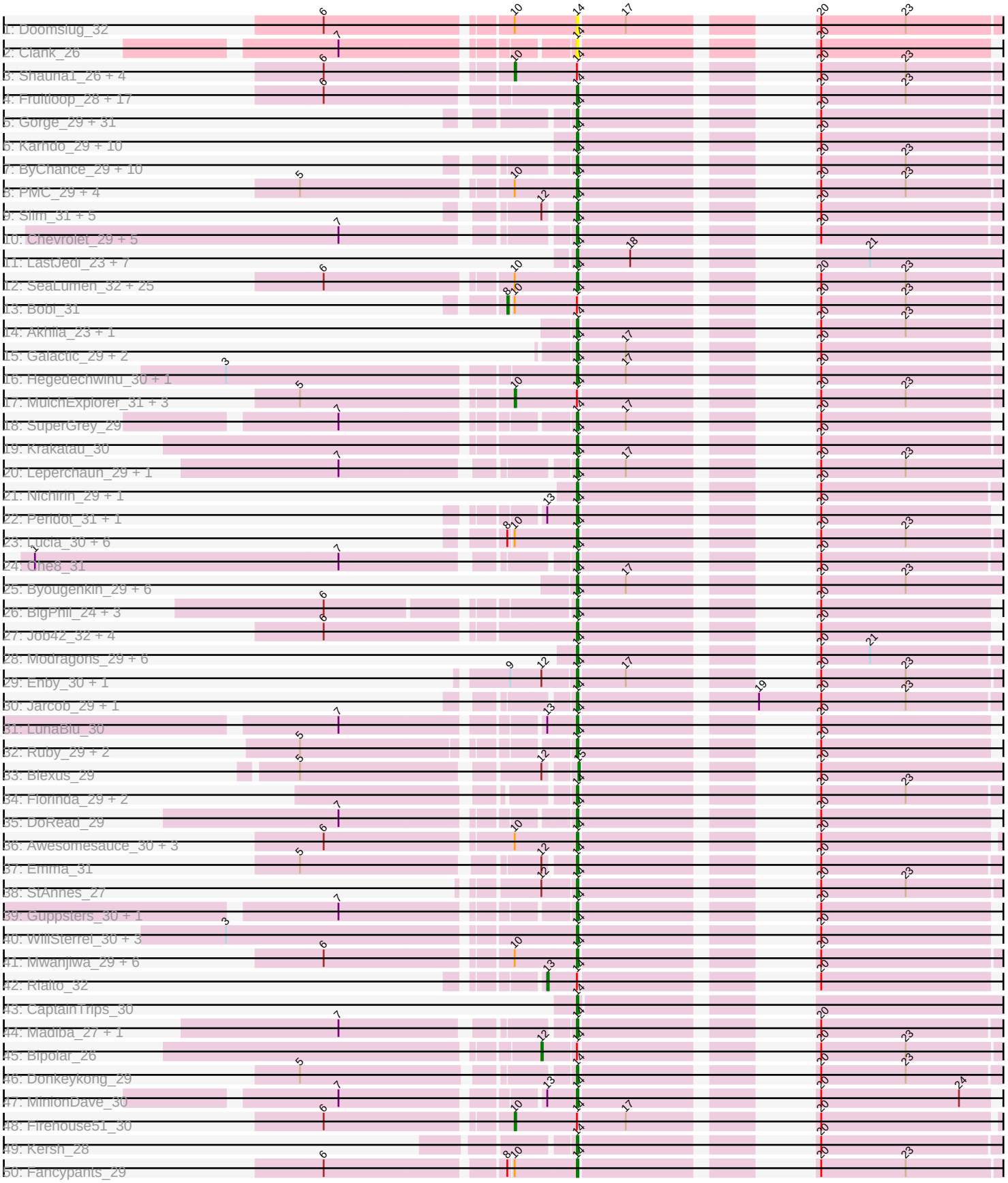
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1: Doomslug_32
2: Clank_26
3: Shauna1_26 + 4
4: Fruitloop_28 + 17
5: Gorge_29 + 31
6: Karndo_29 + 10
7: ByChance_29 + 10
8: PMC_29 + 4
9: Slim_31 + 5
10: Chevrolet_29 + 5
11: LastJedi_23 + 7
12: SeaLumen_32 + 25
13: Bobi_31
14: Akhila_23 + 1
15: Galactic_29 + 2
16: Hegedechwinu_30 + 1
17: MulchExplorer_31 + 3
18: SuperGrey_29
19: Krakatau_30
20: Leperchaun_29 + 1
21: Nichirin_29 + 1
22: Peridot_31 + 1
23: Lucia_30 + 6
24: Gine8_31
25: Byougenkin_29 + 6
26: BigPhil_24 + 3
27: Job42_32 + 4
28: Modragons_29 + 6
29: Enby_30 + 1
30: Jarcob_29 + 1
31: LunaBlu_30
32: Ruby_29 + 2
33: Blexus_29
34: Florinda_29 + 2
35: DoRead_29
36: Awesomesauce_30 + 3
37: Emma_31
38: StAnnes_27
39: Guppsters_30 + 1
40: WillSterrel_30 + 3
41: Mwanjiwa_29 + 6
42: Rialto_32
43: CaptainTrips_30
44: Madiba_27 + 1
45: Bipolar_26
46: Donkeykong_29
47: MinionDave_30
48: Firehouse51_30
49: Kersh_28
50: Fancypants_29

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51: Tchotchke_28
52: OwisT2W_30
53: Latretium_30
54: Sassafras_29 + 1
55: Spikefee_30
56: Simran21_31
57: Starcevich_32
58: Phalconet_29 + 1
59: Phasin_30 + 2
60: Ochi17_27
61: Kenuna5_26 + 2
62: Fastidio_31
63: Ogopogo_29
64: Ramulus_29
65: Ibhubesi_29 + 1
66: GOmbie_29 + 2
67: Nitzel_30
68: SG4_29
69: MadMen_26
70: Sabbb_30
71: Ms6_23
72: BuzzLyseyear_31
73: Maravista_29
74: Ramsey_30
75: Beanstalk_31
76: Soul22_33
77: MulchSalad_25
78: Okabe_29 + 1
79: Xerxes_27 + 15
80: Duplicity_27 + 5
81: Cubone_27
82: LilSpotty_30

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 347187 Report

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

Pham number 347187 has 285 members, 19 are drafts.

Phages represented in each track:
• Track 1 : Doomslug_32
• Track 2 : Clank_26
• Track 3 : Shauna1_26, Tweety_29, Wee_30, Taj_29, Ardmore_28
• Track 4 : Fruitloop_28, Flathead_29, Doug_30, Filuzino_29, Eish_29, Dorothy_29, Batiatus_29, Hlubikazi_29, Mandlovu_29, Medindi_30, Melissauren88_29, KristaRAM_30, Ovechkin_29, DaddyRickover_29, Strokeseat_29, Marker_30, DLane_29, Aubs_29
• Track 5 : Gorge_29, Sparkdehlily_29, Renaud18_29, Saal_29, BobaPhett_29, Cheesepuff_31, Daenerys_29, OlympiaSaint_29, Empress_30, Sandalphon_30, James_29, Mattes_29, KingMidas_30, Dante_29, Cabrinians_29, FreddyB_29, Mutaforma13_29, OldBen_29, Scottish_30, DRBy19_29, Whatsapiecost_29, Philus_29, RitaG_29, TDanisky_29, Wachhund_29, JoeyJr_29, BlueCrab_29, Priscilla_29, Piper2020_31, Radiance_29, Spoonbill_29, Chuckly_29
• Track 6 : Karhdo_29, Mantra_29, Alexphander_31, BodEinwohner17_29, Estave1_27, ThetaBob_28, Nimbo_29, Stap_30, Totinger_30, GigiOuiOui_29, DirtMcgirt_30
• Track 7 : ByChance_29, Zizzle_29, Nivrat_29, ShowerHandel_29, Burwell21_29, Yorick_29, Lizziana_29, Martik_29, LilMoolah_29, NormanBulbieJr_29, SwagPigglett_29
• Track 8 : PMC_29, Phatniss_30, Llij_29, QuickMath_30, Kimberlium_31
• Track 9 : Slim_31, Emmaloid_31, EmiMonkey_30, Mahavrat_29, PhlipPhlop_30, PHappiness_29
• Track 10 : Chevrolet_29, Grimmer_31, Eradicator_29, Juniper1_29, Cornie_29, ArcusAngelus_29
• Track 11 : LastJedi_23, Brocalys_24, Clifton_23, Jennelsea_23, Koella_23, Pippy_23, LordVader_24, Crumble_23
• Track 12 : SeaLumen_32, XFactor_29, IbOuu_30, Royals2015_29, Jant_30, Polka14_30, MilleniumForce_30, Coco12_28, Aloeri_31, Violac_30, Seagreen_30, Brushbloom_30, Enzomatic_33, Beakin_30, Kingsley_27, Polo2Bam_33, DaWorst_31, DocMcStuffins_31, Moonbeam_30, Cornucopia_30, DeadP_29, ChickenDinner_31, JalFarm20_31, Brookers_27, VRedHorse_29, Phanphagia_26
• Track 13 : Bobi_31
• Track 14 : Akhila_23, MilanaBonita_23
• Track 15 : Galactic_29, DillTech15_29, Vivum_29
• Track 16 : Hegedechwinu_30, Juice456_30
• Track 17 : MulchExplorer_31, Rockne_29, UncleRicky_32, Drago_30
• Track 18 : SuperGrey_29

• Track 19 : Krakatau_30
• Track 20 : Leperchaun_29, Pacc40_29
• Track 21 : Nichirin_29, Rita_29
• Track 22 : Peridot_31, LittleShirley_31
• Track 23 : Lucia_30, Deb65_29, KingJulian_29, Geralt_29, Leozinho_30, PatoPoderoso_29, Corium_29
• Track 24 : Che8_31
• Track 25 : Byougenkin_29, ShroomBoi_26, SilverChicken_36, RedBird_29, RockyHorror_30, Zerg_29, Tootsieroll_30
• Track 26 : BigPhil_24, Cerasum_24, Sarma624_24, Velveteen_24
• Track 27 : Job42_32, Gandalph_29, Mozy_30, DosHalletts_30, EleanorGeorge_29
• Track 28 : Modragons_29, Llama_29, Seabastian_29, Jinglebell_28, AlpineSix_30, OfUltron_29, Oksu_30
• Track 29 : Enby_30, Lorde_30
• Track 30 : Jarcob_29, ShiLan_29
• Track 31 : LunaBlu_30
• Track 32 : Ruby_29, MisterCuddles_29, Girr_29
• Track 33 : Blexus_29
• Track 34 : Florinda_29, Girafales_30, Quico_30
• Track 35 : DoRead_29
• Track 36 : Awesomesauce_30, IMpilo_28, TootsiePop_30, Misha28_30
• Track 37 : Emma_31
• Track 38 : StAnnes_27
• Track 39 : Guppsters_30, Pollywog_29
• Track 40 : WillSterrel_30, Bubbles123_30, Spartacus_30, IrishSherpFalk_30
• Track 41 : Mwanjiwa_29, NewHope4_31, Blarby_37, Mova_30, PopTart_29, Minnie_30, SassyB_29
• Track 42 : Rialto_32
• Track 43 : CaptainTrips_30
• Track 44 : Madiba_27, Topiatin_32
• Track 45 : Bipolar_26
• Track 46 : Donkeykong_29
• Track 47 : MinionDave_30
• Track 48 : Firehouse51_30
• Track 49 : Kersh_28
• Track 50 : Fancypants_29
• Track 51 : Tchotchke_28
• Track 52 : OwlsT2W_30
• Track 53 : Latretium_30
• Track 54 : Sassafras_29, Inventum_29
• Track 55 : Spikelee_30
• Track 56 : SimranZ1_31
• Track 57 : Starcevich_32
• Track 58 : Phalconet_29, PhesterPhotato_29
• Track 59 : Phasih_30, Poenanya_29, Veteran_29
• Track 60 : Ochi17_27
• Track 61 : Kenuha5_26, Boomer_30, Whouxphf_29
• Track 62 : Fastidio_31
• Track 63 : Ogopogo_29
• Track 64 : Hamulus_29
• Track 65 : Ibhubesi_29, Harley_29
• Track 66 : GUmbie_29, DotProduct_29, Doomphist_29
• Track 67 : Nitzel_30

• Track 68 : SG4_29
• Track 69 : MadMen_26
• Track 70 : Sabbb_30
• Track 71 : Ms6_23
• Track 72 : BuzzLyseyear_31
• Track 73 : Maravista_29
• Track 74 : Ramsey_30
• Track 75 : Beanstalk_31
• Track 76 : Soul22_33
• Track 77 : MulchSalad_25
• Track 78 : Okabe_29, SiSi_29
• Track 79 : Xerxes_27, Parmesanjohn_27, Schnauzer_27, Charlie_27, Melville_27, Gex_27, Smurph_27, Tortoise12_27, Pipsqueaks_27, Magsby_27, Bosection6_27, Aggie_27, Carcharodon_27, Journey_27, Philonius_27, Chewbacca_27
• Track 80 : Duplicity_27, Silvy_27, Tessdabest_26, EGUnicorn_27, Tapioca_27, Silvafighter_27
• Track 81 : Cubone_27
• Track 82 : LilSpotty_30

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

The start number called the most often in the published annotations is 14, it was called in 229 of the 266 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Akhila_23, Alexphander_31, Aloeri_31, AlpineSix_30, ArcusAngelus_29, Aubs_29, Awesomesauce_30, Batiatus_29, Beakin_30, Beanstalk_31, BigPhil_24, Blarby_37, BlueCrab_29, BobaPhett_29, BodEinwohner17_29, Boomer_30, Brocalys_24, Brookers_27, Brushbloom_30, Bubbles123_30, Burwell21_29, BuzzLyseyear_31, ByChance_29, Byougenkin_29, Cabrinians_29, CaptainTrips_30, Cerasum_24, Che8_31, Cheesepuff_31, Chevrolet_29, ChickenDinner_31, Chuckly_29, Clank_26, Clifton_23, Coco12_28, Corium_29, Cornie_29, Cornucopia_30, Crumble_23, DLane_29, DRBy19_29, DaWorst_31, DaddyRickover_29, Daenerys_29, Dante_29, DeadP_29, Deb65_29, DillTech15_29, DirtMcgirt_30, DoRead_29, DocMcStuffins_31, Donkeykong_29, Doomslug_32, Dorothy_29, DosHalletts_30, Doug_30, Duplicity_27, EGUnicorn_27, Eish_29, EleanorGeorge_29, EmiMonkey_30, Emma_31, Emmaloid_31, Empress_30, Enby_30, Enzomatic_33, Eradicator_29, Estave1_27, Fancypants_29, Fastidio_31, Filuzino_29, Flathead_29, Florinda_29, FreddyB_29, Fruitloop_28, Galactic_29, Gandalph_29, Geralt_29, GigiOuiOui_29, Girafales_30, Girr_29, Gorge_29, Grimmer_31, Guppsters_30, Harley_29, Hegedechwinu_30, Hlubikazi_29, IMpilo_28, IbOuu_30, Ibhubesi_29, Inventum_29, IrishSherpFalk_30, JalFarm20_31, James_29, Jant_30, Jarcob_29, Jennelsea_23, Jinglebell_28, Job42_32, JoeyJr_29, Juice456_30, Juniper1_29, Karhdo_29, Kenuha5_26, Kersh_28, Kimberlium_31, KingJulian_29, KingMidas_30, Kingsley_27, Koella_23, Krakatau_30, KristaRAM_30, LastJedi_23, Latretium_30, Leozinho_30, Leperchaun_29, LilMoolah_29, LittleShirley_31, Lizziana_29, Llama_29, Llij_29, LordVader_24, Lorde_30, Lucia_30, LunaBlu_30, MadMen_26, Madiba_27, Mahavrat_29, Mandlovu_29, Mantra_29, Maravista_29, Marker_30, Martik_29, Mattes_29, Medindi_30, Melissauren88_29, MilanaBonita_23, MilleniumForce_30, MinionDave_30, Minnie_30, Misha28_30, MisterCuddles_29,

Modragons_29, Moonbeam_30, Mova_30, Mozy_30, Ms6_23, MulchSalad_25, Mutaforma13_29, Mwanjiwa_29, NewHope4_31, Nichirin_29, Nimbo_29, Nitzel_30, Nivrat_29, NormanBulbieJr_29, Ochi17_27, OfUltron_29, Okabe_29, Oksu_30, OldBen_29, OlympiaSaint_29, Ovechkin_29, OwlsT2W_30, PHappiness_29, PMC_29, Pacc40_29, PatoPoderoso_29, Peridot_31, Phalconet_29, Phanphagia_26, Phasih_30, Phatniss_30, PhesterPhotato_29, Philus_29, PhlipPhlop_30, Piper2020_31, Pippy_23, Poenanya_29, Polka14_30, Pollywog_29, Polo2Bam_33, PopTart_29, Priscilla_29, QuickMath_30, Quico_30, Radiance_29, Ramsey_30, RedBird_29, Renaud18_29, RitaG_29, Rita_29, RockyHorror_30, Royals2015_29, Ruby_29, Saal_29, Sabbb_30, Sandalphon_30, Sarma624_24, Sassafras_29, SassyB_29, Scottish_30, SeaLumen_32, Seabastian_29, Seagreen_30, ShiLan_29, ShowerHandel_29, ShroomBoi_26, SiSi_29, Silvafighter_27, SilverChicken_36, Silvy_27, SimranZ1_31, Slim_31, Soul22_33, Sparkdehlily_29, Spartacus_30, Spikelee_30, Spoonbill_29, StAnnes_27, Stap_30, Starcevich_32, Strokeseat_29, SuperGrey_29, SwagPigglett_29, TDanisky_29, Tapioca_27, Tchotchke_28, Tessdabest_26, ThetaBob_28, TootsiePop_30, Tootsieroll_30, Topiatin_32, Totinger_30, VRedHorse_29, Velveteen_24, Veteran_29, Violac_30, Vivum_29, Wachhund_29, Whatsapiecost_29, Whouxphf_29, WillSterrel_30, XFactor_29, Yorick_29, Zerg_29, Zizzle_29,

Genes that have the "Most Annotated" start but do not call it:
• Aggie_27, Ardmore_28, Bipolar_26, Bobi_31, Bosection6_27, Carcharodon_27, Charlie_27, Chewbacca_27, Cubone_27, Doomphist_29, DotProduct_29, Drago_30, Firehouse51_30, GUmbie_29, Gex_27, Hamulus_29, Journey_27, LilSpotty_30, Magsby_27, Melville_27, MulchExplorer_31, Ogopogo_29, Parmesanjohn_27, Philonius_27, Pipsqueaks_27, Rialto_32, Rockne_29, SG4_29, Schnauzer_27, Shauna1_26, Smurph_27, Taj_29, Tortoise12_27, Tweety_29, UncleRicky_32, Wee_30, Xerxes_27,

Genes that do not have the "Most Annotated" start:
• Blexus_29,

Summary by start number:

Start 8:
• Found in 10 of 285 (3.5%) of genes in pham
• Manual Annotations of this start: 1 of 266
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Bobi_31 (F1),

Start 9:
• Found in 27 of 285 (9.5%) of genes in pham
• Manual Annotations of this start: 18 of 266
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Aggie_27 (N), Bosection6_27 (N), Carcharodon_27 (N), Charlie_27 (N), Chewbacca_27 (N), Gex_27 (N), Journey_27 (N), LilSpotty_30 (singleton), Magsby_27 (N), Melville_27 (N), Parmesanjohn_27 (N), Philonius_27 (N), Pipsqueaks_27 (N), SG4_29 (F1), Schnauzer_27 (N), Smurph_27 (N), Tortoise12_27 (N), Xerxes_27 (N),

Start 10:
• Found in 91 of 285 (31.9%) of genes in pham
• Manual Annotations of this start: 10 of 266

• Called 12.1% of time when present
• Phage (with cluster) where this start called: Ardmore_28 (F1), Cubone_27 (N), Drago_30 (F1), Firehouse51_30 (F1), MulchExplorer_31 (F1), Rockne_29 (F1), Shauna1_26 (F1), Taj_29 (F1), Tweety_29 (F1), UncleRicky_32 (F1), Wee_30 (F1),

Start 12:
• Found in 24 of 285 (8.4%) of genes in pham
• Manual Annotations of this start: 6 of 266
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Bipolar_26 (F1), Doomphist_29 (F1), DotProduct_29 (F1), GUmbie_29 (F1), Hamulus_29 (F1), Ogopogo_29 (F1),

Start 13:
• Found in 5 of 285 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 266
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Rialto_32 (F1),

Start 14:
• Found in 284 of 285 (99.6%) of genes in pham
• Manual Annotations of this start: 229 of 266
• Called 87.0% of time when present
• Phage (with cluster) where this start called: Akhila_23 (F1), Alexphander_31 (F1), Aloeri_31 (F1), AlpineSix_30 (F1), ArcusAngelus_29 (F1), Aubs_29 (F1), Awesomesauce_30 (F1), Batiatus_29 (F1), Beakin_30 (F1), Beanstalk_31 (F1), BigPhil_24 (F1), Blarby_37 (F), BlueCrab_29 (F1), BobaPhett_29 (F1), BodEinwohner17_29 (F1), Boomer_30 (F1), Brocalys_24 (F1), Brookers_27 (F1), Brushbloom_30 (F1), Bubbles123_30 (F1), Burwell21_29 (F1), BuzzLyseyear_31 (F1), ByChance_29 (F1), Byougenkin_29 (F1), Cabrinians_29 (F1), CaptainTrips_30 (F1), Cerasum_24 (F1), Che8_31 (F1), Cheesepuff_31 (F1), Chevrolet_29 (F1), ChickenDinner_31 (F1), Chuckly_29 (F1), Clank_26 (F), Clifton_23 (F1), Coco12_28 (F1), Corium_29 (F1), Cornie_29 (F5), Cornucopia_30 (F1), Crumble_23 (F1), DLane_29 (F1), DRBy19_29 (F1), DaWorst_31 (F1), DaddyRickover_29 (F1), Daenerys_29 (F1), Dante_29 (F1), DeadP_29 (F1), Deb65_29 (F1), DillTech15_29 (F1), DirtMcgirt_30 (F1), DoRead_29 (F1), DocMcStuffins_31 (F1), Donkeykong_29 (F1), Doomslug_32 (F), Dorothy_29 (F1), DosHalletts_30 (F1), Doug_30 (F1), Duplicity_27 (N), EGUnicorn_27 (N), Eish_29 (F1), EleanorGeorge_29 (F1), EmiMonkey_30 (F1), Emma_31 (F1), Emmaloid_31 (F1), Empress_30 (F1), Enby_30 (F1), Enzomatic_33 (F1), Eradicator_29 (F1), Estave1_27 (F1), Fancypants_29 (F1), Fastidio_31 (F1), Filuzino_29 (F1), Flathead_29 (F1), Florinda_29 (F1), FreddyB_29 (F1), Fruitloop_28 (F1), Galactic_29 (F1), Gandalph_29 (F1), Geralt_29 (F1), GigiOuiOui_29 (F1), Girafales_30 (F1), Girr_29 (F1), Gorge_29 (F1), Grimmer_31 (F1), Guppsters_30 (F1), Harley_29 (F1), Hegedechwinu_30 (F1), Hlubikazi_29 (F1), IMpilo_28 (F1), IbOuu_30 (F1), Ibhubesi_29 (F1), Inventum_29 (F1), IrishSherpFalk_30 (F1), JalFarm20_31 (F1), James_29 (F1), Jant_30 (F1), Jarcob_29 (F1), Jennelsea_23 (F1), Jinglebell_28 (F1), Job42_32 (F1), JoeyJr_29 (F1), Juice456_30 (F1), Juniper1_29 (F1), Karhdo_29 (F1), Kenuha5_26 (F1), Kersh_28 (F1), Kimberlium_31 (F1), KingJulian_29 (F1), KingMidas_30 (F1), Kingsley_27 (F1), Koella_23 (F1), Krakatau_30 (F1), KristaRAM_30 (F1), LastJedi_23 (F1), Latretium_30 (F1), Leozinho_30 (F1), Leperchaun_29 (F1), LilMoolah_29 (F1), LittleShirley_31 (F1), Lizziana_29 (F1), Llama_29 (F1), Llij_29 (F1), LordVader_24 (F), Lorde_30 (F1), Lucia_30 (F1), LunaBlu_30 (F1), MadMen_26 (F1), Madiba_27 (F1), Mahavrat_29 (F1), Mandlovu_29 (F1), Mantra_29 (F1), Maravista_29 (F1),

Marker_30 (F1), Martik_29 (F1), Mattes_29 (F1), Medindi_30 (F1), Melissauren88_29 (F1), MilanaBonita_23 (F1), MilleniumForce_30 (F1), MinionDave_30 (F1), Minnie_30 (F1), Misha28_30 (F1), MisterCuddles_29 (F1), Modragons_29 (F1), Moonbeam_30 (F1), Mova_30 (F1), Mozy_30 (F1), Ms6_23 (F1), MulchSalad_25 (F7), Mutaforma13_29 (F1), Mwanjiwa_29 (F1), NewHope4_31 (F1), Nichirin_29 (F1), Nimbo_29 (F1), Nitzel_30 (F1), Nivrat_29 (F1), NormanBulbieJr_29 (F1), Ochi17_27 (F1), OfUltron_29 (F1), Okabe_29 (F8), Oksu_30 (F1), OldBen_29 (F1), OlympiaSaint_29 (F1), Ovechkin_29 (F1), OwlsT2W_30 (F1), PHappiness_29 (F1), PMC_29 (F1), Pacc40_29 (F1), PatoPoderoso_29 (F1), Peridot_31 (F1), Phalconet_29 (F1), Phanphagia_26 (F1), Phasih_30 (F1), Phatniss_30 (F1), PhesterPhotato_29 (F1), Philus_29 (F1), PhlipPhlop_30 (F1), Piper2020_31 (F1), Pippy_23 (F1), Poenanya_29 (F1), Polka14_30 (F1), Pollywog_29 (F1), Polo2Bam_33 (F1), PopTart_29 (F1), Priscilla_29 (F1), QuickMath_30 (F1), Quico_30 (F1), Radiance_29 (F1), Ramsey_30 (F1), RedBird_29 (F1), Renaud18_29 (F4), RitaG_29 (F1), Rita_29 (F1), RockyHorror_30 (F1), Royals2015_29 (F1), Ruby_29 (F1), Saal_29 (F1), Sabbb_30 (F1), Sandalphon_30 (F1), Sarma624_24 (F1), Sassafras_29 (F1), SassyB_29 (F1), Scottish_30 (F1), SeaLumen_32 (F1), Seabastian_29 (F1), Seagreen_30 (F1), ShiLan_29 (F1), ShowerHandel_29 (F1), ShroomBoi_26 (F1), SiSi_29 (F1), Silvafighter_27 (N), SilverChicken_36 (F2), Silvy_27 (N), SimranZ1_31 (F1), Slim_31 (F1), Soul22_33 (F2), Sparkdehlily_29 (F1), Spartacus_30 (F1), Spikelee_30 (F1), Spoonbill_29 (F1), StAnnes_27 (F1), Stap_30 (F1), Starcevich_32 (F1), Strokeseat_29 (F1), SuperGrey_29 (F1), SwagPigglett_29 (F1), TDanisky_29 (F1), Tapioca_27 (N), Tchotchke_28 (F1), Tessdabest_26 (N), ThetaBob_28 (F4), TootsiePop_30 (F1), Tootsieroll_30 (F1), Topiatin_32 (F1), Totinger_30 (F1), VRedHorse_29 (F1), Velveteen_24 (F1), Veteran_29 (F1), Violac_30 (F1), Vivum_29 (F1), Wachhund_29 (F1), Whatsapiecost_29 (F1), Whouxphf_29 (F1), WillSterrel_30 (F1), XFactor_29 (F1), Yorick_29 (F1), Zerg_29 (F1), Zizzle_29 (F1),

Start 15:
• Found in 1 of 285 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 266
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Blexus_29 (F1),

Summary by clusters:

There are 9 clusters represented in this pham: F1, F2, F4, F5, F, F8, F7, singleton, N,

Info for manual annotations of cluster F:
•Start number 14 was manually annotated 1 time for cluster F.

Info for manual annotations of cluster F1:
•Start number 8 was manually annotated 1 time for cluster F1.
•Start number 9 was manually annotated 1 time for cluster F1.
•Start number 10 was manually annotated 9 times for cluster F1.
•Start number 12 was manually annotated 6 times for cluster F1.
•Start number 13 was manually annotated 1 time for cluster F1.
•Start number 14 was manually annotated 218 times for cluster F1.
•Start number 15 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:
•Start number 14 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F4:
•Start number 14 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster F5:
•Start number 14 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster F7:
•Start number 14 was manually annotated 1 time for cluster F7.

Info for manual annotations of cluster N:
•Start number 9 was manually annotated 16 times for cluster N.
•Start number 10 was manually annotated 1 time for cluster N.
•Start number 14 was manually annotated 5 times for cluster N.

Gene Information:

Gene: Aggie_27 Start: 22566, Stop: 22838, Start Num: 9
Candidate Starts for Aggie_27:
(Start: 9 @22566 has 18 MA's), (Start: 10 @22569 has 10 MA's), (Start: 14 @22602 has 229 MA's), (16, 22620),

Gene: Akhila_23 Start: 22215, Stop: 22448, Start Num: 14
Candidate Starts for Akhila_23:
(Start: 14 @22215 has 229 MA's), (20, 22323), (23, 22380),

Gene: Alexphander_31 Start: 26619, Stop: 26840, Start Num: 14
Candidate Starts for Alexphander_31:
(Start: 14 @26619 has 229 MA's), (20, 26727),

Gene: Aloeri_31 Start: 26708, Stop: 26941, Start Num: 14
Candidate Starts for Aloeri_31:
(6, 26555), (Start: 10 @26669 has 10 MA's), (Start: 14 @26708 has 229 MA's), (20, 26816), (23, 26873),

Gene: AlpineSix_30 Start: 26306, Stop: 26539, Start Num: 14
Candidate Starts for AlpineSix_30:
(Start: 14 @26306 has 229 MA's), (20, 26414), (21, 26447),

Gene: ArcusAngelus_29 Start: 26077, Stop: 26310, Start Num: 14
Candidate Starts for ArcusAngelus_29:
(7, 25942), (Start: 14 @26077 has 229 MA's), (20, 26185),

Gene: Ardmore_28 Start: 26093, Stop: 26365, Start Num: 10
Candidate Starts for Ardmore_28:
(6, 25979), (Start: 10 @26093 has 10 MA's), (Start: 14 @26132 has 229 MA's), (20, 26240), (23, 26297),

Gene: Aubs_29 Start: 26242, Stop: 26475, Start Num: 14
Candidate Starts for Aubs_29:

(6, 26089), (Start: 14 @26242 has 229 MA's), (20, 26350), (23, 26407),

Gene: Awesomesauce_30 Start: 25970, Stop: 26203, Start Num: 14
Candidate Starts for Awesomesauce_30:
(6, 25814), (Start: 10 @25931 has 10 MA's), (Start: 14 @25970 has 229 MA's), (20, 26078),

Gene: Batiatus_29 Start: 26125, Stop: 26358, Start Num: 14
Candidate Starts for Batiatus_29:
(6, 25972), (Start: 14 @26125 has 229 MA's), (20, 26233), (23, 26290),

Gene: Beakin_30 Start: 25994, Stop: 26227, Start Num: 14
Candidate Starts for Beakin_30:
(6, 25841), (Start: 10 @25955 has 10 MA's), (Start: 14 @25994 has 229 MA's), (20, 26102), (23, 26159),

Gene: Beanstalk_31 Start: 26270, Stop: 26503, Start Num: 14
Candidate Starts for Beanstalk_31:
(6, 26117), (Start: 14 @26270 has 229 MA's), (17, 26300), (20, 26378),

Gene: BigPhil_24 Start: 22110, Stop: 22331, Start Num: 14
Candidate Starts for BigPhil_24:
(6, 21963), (Start: 14 @22110 has 229 MA's), (20, 22218),

Gene: Bipolar_26 Start: 25134, Stop: 25388, Start Num: 12
Candidate Starts for Bipolar_26:
(Start: 12 @25134 has 6 MA's), (Start: 14 @25155 has 229 MA's), (20, 25263), (23, 25320),

Gene: Blarby_37 Start: 26544, Stop: 26780, Start Num: 14
Candidate Starts for Blarby_37:
(6, 26391), (Start: 10 @26505 has 10 MA's), (Start: 14 @26544 has 229 MA's), (20, 26652),

Gene: Blexus_29 Start: 26395, Stop: 26631, Start Num: 15
Candidate Starts for Blexus_29:
(5, 26233), (Start: 12 @26377 has 6 MA's), (Start: 15 @26395 has 1 MA's), (20, 26503),

Gene: BlueCrab_29 Start: 26264, Stop: 26497, Start Num: 14
Candidate Starts for BlueCrab_29:
(Start: 14 @26264 has 229 MA's), (20, 26372),

Gene: BobaPhett_29 Start: 26246, Stop: 26479, Start Num: 14
Candidate Starts for BobaPhett_29:
(Start: 14 @26246 has 229 MA's), (20, 26354),

Gene: Bobi_31 Start: 26797, Stop: 27072, Start Num: 8
Candidate Starts for Bobi_31:
(Start: 8 @26797 has 1 MA's), (Start: 10 @26800 has 10 MA's), (Start: 14 @26839 has 229 MA's), (20, 26947), (23, 27004),

Gene: BodEinwohner17_29 Start: 26405, Stop: 26638, Start Num: 14
Candidate Starts for BodEinwohner17_29:
(Start: 14 @26405 has 229 MA's), (20, 26513),

Gene: Boomer_30 Start: 25887, Stop: 26108, Start Num: 14

Candidate Starts for Boomer_30:
(5, 25719), (Start: 10 @25848 has 10 MA's), (Start: 14 @25887 has 229 MA's), (20, 25995),

Gene: Bosection6_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Bosection6_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Brocalys_24 Start: 21916, Stop: 22155, Start Num: 14
Candidate Starts for Brocalys_24:
(Start: 14 @21916 has 229 MA's), (18, 21952), (21, 22060),

Gene: Brookers_27 Start: 25074, Stop: 25307, Start Num: 14
Candidate Starts for Brookers_27:
(6, 24921), (Start: 10 @25035 has 10 MA's), (Start: 14 @25074 has 229 MA's), (20, 25182), (23, 25239),

Gene: Brushbloom_30 Start: 26149, Stop: 26382, Start Num: 14
Candidate Starts for Brushbloom_30:
(6, 25996), (Start: 10 @26110 has 10 MA's), (Start: 14 @26149 has 229 MA's), (20, 26257), (23, 26314),

Gene: Bubbles123_30 Start: 26821, Stop: 27042, Start Num: 14
Candidate Starts for Bubbles123_30:
(3, 26602), (Start: 14 @26821 has 229 MA's), (20, 26929),

Gene: Burwell21_29 Start: 26271, Stop: 26504, Start Num: 14
Candidate Starts for Burwell21_29:
(Start: 14 @26271 has 229 MA's), (20, 26379), (23, 26436),

Gene: BuzzLyseyear_31 Start: 26650, Stop: 26871, Start Num: 14
Candidate Starts for BuzzLyseyear_31:
(Start: 14 @26650 has 229 MA's),

Gene: ByChance_29 Start: 26248, Stop: 26481, Start Num: 14
Candidate Starts for ByChance_29:
(Start: 14 @26248 has 229 MA's), (20, 26356), (23, 26413),

Gene: Byougenkin_29 Start: 26154, Stop: 26390, Start Num: 14
Candidate Starts for Byougenkin_29:
(Start: 14 @26154 has 229 MA's), (17, 26184), (20, 26262), (23, 26319),

Gene: Cabrinians_29 Start: 26274, Stop: 26507, Start Num: 14
Candidate Starts for Cabrinians_29:
(Start: 14 @26274 has 229 MA's), (20, 26382),

Gene: CaptainTrips_30 Start: 26474, Stop: 26710, Start Num: 14
Candidate Starts for CaptainTrips_30:
(Start: 14 @26474 has 229 MA's),

Gene: Carcharodon_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Carcharodon_27:

(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Cerasum_24 Start: 22110, Stop: 22331, Start Num: 14
Candidate Starts for Cerasum_24:
(6, 21963), (Start: 14 @22110 has 229 MA's), (20, 22218),

Gene: Charlie_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Charlie_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Che8_31 Start: 26453, Stop: 26686, Start Num: 14
Candidate Starts for Che8_31:
(1, 26114), (7, 26318), (Start: 14 @26453 has 229 MA's), (20, 26561),

Gene: Cheesepuff_31 Start: 27095, Stop: 27316, Start Num: 14
Candidate Starts for Cheesepuff_31:
(Start: 14 @27095 has 229 MA's), (20, 27203),

Gene: Chevrolet_29 Start: 26078, Stop: 26311, Start Num: 14
Candidate Starts for Chevrolet_29:
(7, 25943), (Start: 14 @26078 has 229 MA's), (20, 26186),

Gene: Chewbacca_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Chewbacca_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: ChickenDinner_31 Start: 26708, Stop: 26941, Start Num: 14
Candidate Starts for ChickenDinner_31:
(6, 26555), (Start: 10 @26669 has 10 MA's), (Start: 14 @26708 has 229 MA's), (20, 26816), (23, 26873),

Gene: Chuckly_29 Start: 26250, Stop: 26486, Start Num: 14
Candidate Starts for Chuckly_29:
(Start: 14 @26250 has 229 MA's), (20, 26358),

Gene: Clank_26 Start: 25286, Stop: 25507, Start Num: 14
Candidate Starts for Clank_26:
(7, 25151), (Start: 14 @25286 has 229 MA's), (20, 25394),

Gene: Clifton_23 Start: 22229, Stop: 22468, Start Num: 14
Candidate Starts for Clifton_23:
(Start: 14 @22229 has 229 MA's), (18, 22265), (21, 22373),

Gene: Coco12_28 Start: 25615, Stop: 25848, Start Num: 14
Candidate Starts for Coco12_28:
(6, 25462), (Start: 10 @25576 has 10 MA's), (Start: 14 @25615 has 229 MA's), (20, 25723), (23, 25780),

Gene: Corium_29 Start: 26289, Stop: 26522, Start Num: 14
Candidate Starts for Corium_29:

(Start: 8 @26247 has 1 MA's), (Start: 10 @26250 has 10 MA's), (Start: 14 @26289 has 229 MA's), (20, 26397), (23, 26454),

Gene: Cornie_29 Start: 26490, Stop: 26723, Start Num: 14
Candidate Starts for Cornie_29:
(7, 26355), (Start: 14 @26490 has 229 MA's), (20, 26598),

Gene: Cornucopia_30 Start: 26153, Stop: 26386, Start Num: 14
Candidate Starts for Cornucopia_30:
(6, 26000), (Start: 10 @26114 has 10 MA's), (Start: 14 @26153 has 229 MA's), (20, 26261), (23, 26318),

Gene: Crumble_23 Start: 22276, Stop: 22515, Start Num: 14
Candidate Starts for Crumble_23:
(Start: 14 @22276 has 229 MA's), (18, 22312), (21, 22420),

Gene: Cubone_27 Start: 22590, Stop: 22859, Start Num: 10
Candidate Starts for Cubone_27:
(Start: 9 @22587 has 18 MA's), (Start: 10 @22590 has 10 MA's), (Start: 14 @22623 has 229 MA's), (16, 22641),

Gene: DLane_29 Start: 26102, Stop: 26335, Start Num: 14
Candidate Starts for DLane_29:
(6, 25949), (Start: 14 @26102 has 229 MA's), (20, 26210), (23, 26267),

Gene: DRBy19_29 Start: 26116, Stop: 26349, Start Num: 14
Candidate Starts for DRBy19_29:
(Start: 14 @26116 has 229 MA's), (20, 26224),

Gene: DaWorst_31 Start: 26632, Stop: 26865, Start Num: 14
Candidate Starts for DaWorst_31:
(6, 26479), (Start: 10 @26593 has 10 MA's), (Start: 14 @26632 has 229 MA's), (20, 26740), (23, 26797),

Gene: DaddyRickover_29 Start: 26272, Stop: 26505, Start Num: 14
Candidate Starts for DaddyRickover_29:
(6, 26119), (Start: 14 @26272 has 229 MA's), (20, 26380), (23, 26437),

Gene: Daenerys_29 Start: 26096, Stop: 26329, Start Num: 14
Candidate Starts for Daenerys_29:
(Start: 14 @26096 has 229 MA's), (20, 26204),

Gene: Dante_29 Start: 26136, Stop: 26369, Start Num: 14
Candidate Starts for Dante_29:
(Start: 14 @26136 has 229 MA's), (20, 26244),

Gene: DeadP_29 Start: 26299, Stop: 26532, Start Num: 14
Candidate Starts for DeadP_29:
(6, 26146), (Start: 10 @26260 has 10 MA's), (Start: 14 @26299 has 229 MA's), (20, 26407), (23, 26464),

Gene: Deb65_29 Start: 26098, Stop: 26331, Start Num: 14
Candidate Starts for Deb65_29:

(Start: 8 @26056 has 1 MA's), (Start: 10 @26059 has 10 MA's), (Start: 14 @26098 has 229 MA's), (20, 26206), (23, 26263),

Gene: DillTech15_29 Start: 26181, Stop: 26414, Start Num: 14
Candidate Starts for DillTech15_29:
(Start: 14 @26181 has 229 MA's), (17, 26211), (20, 26289),

Gene: DirtMcgirt_30 Start: 25919, Stop: 26152, Start Num: 14
Candidate Starts for DirtMcgirt_30:
(Start: 14 @25919 has 229 MA's), (20, 26027),

Gene: DoRead_29 Start: 26089, Stop: 26310, Start Num: 14
Candidate Starts for DoRead_29:
(7, 25954), (Start: 14 @26089 has 229 MA's), (20, 26197),

Gene: DocMcStuffins_31 Start: 26708, Stop: 26941, Start Num: 14
Candidate Starts for DocMcStuffins_31:
(6, 26555), (Start: 10 @26669 has 10 MA's), (Start: 14 @26708 has 229 MA's), (20, 26816), (23, 26873),

Gene: Donkeykong_29 Start: 26267, Stop: 26500, Start Num: 14
Candidate Starts for Donkeykong_29:
(5, 26105), (Start: 14 @26267 has 229 MA's), (20, 26375), (23, 26432),

Gene: Doomphist_29 Start: 26200, Stop: 26451, Start Num: 12
Candidate Starts for Doomphist_29:
(5, 26044), (Start: 12 @26200 has 6 MA's), (Start: 14 @26218 has 229 MA's), (20, 26326),

Gene: Doomslug_32 Start: 25973, Stop: 26206, Start Num: 14
Candidate Starts for Doomslug_32:
(6, 25820), (Start: 10 @25934 has 10 MA's), (Start: 14 @25973 has 229 MA's), (17, 26003), (20, 26081), (23, 26138),

Gene: Dorothy_29 Start: 26057, Stop: 26290, Start Num: 14
Candidate Starts for Dorothy_29:
(6, 25904), (Start: 14 @26057 has 229 MA's), (20, 26165), (23, 26222),

Gene: DosHalletts_30 Start: 26214, Stop: 26435, Start Num: 14
Candidate Starts for DosHalletts_30:
(6, 26061), (Start: 14 @26214 has 229 MA's), (20, 26322),

Gene: DotProduct_29 Start: 26067, Stop: 26318, Start Num: 12
Candidate Starts for DotProduct_29:
(5, 25911), (Start: 12 @26067 has 6 MA's), (Start: 14 @26085 has 229 MA's), (20, 26193),

Gene: Doug_30 Start: 26649, Stop: 26882, Start Num: 14
Candidate Starts for Doug_30:
(6, 26496), (Start: 14 @26649 has 229 MA's), (20, 26757), (23, 26814),

Gene: Drago_30 Start: 25873, Stop: 26145, Start Num: 10
Candidate Starts for Drago_30:
(5, 25744), (Start: 10 @25873 has 10 MA's), (Start: 14 @25912 has 229 MA's), (20, 26020), (23, 26077),

Gene: Duplicity_27 Start: 22601, Stop: 22837, Start Num: 14
Candidate Starts for Duplicity_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: EGUnicorn_27 Start: 22601, Stop: 22837, Start Num: 14
Candidate Starts for EGUnicorn_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Eish_29 Start: 26237, Stop: 26470, Start Num: 14
Candidate Starts for Eish_29:
(6, 26084), (Start: 14 @26237 has 229 MA's), (20, 26345), (23, 26402),

Gene: EleanorGeorge_29 Start: 26407, Stop: 26640, Start Num: 14
Candidate Starts for EleanorGeorge_29:
(6, 26254), (Start: 14 @26407 has 229 MA's), (20, 26515),

Gene: EmiMonkey_30 Start: 27630, Stop: 27863, Start Num: 14
Candidate Starts for EmiMonkey_30:
(Start: 12 @27612 has 6 MA's), (Start: 14 @27630 has 229 MA's), (20, 27738),

Gene: Emma_31 Start: 26666, Stop: 26899, Start Num: 14
Candidate Starts for Emma_31:
(5, 26504), (Start: 12 @26648 has 6 MA's), (Start: 14 @26666 has 229 MA's), (20, 26774),

Gene: Emmaloid_31 Start: 27477, Stop: 27710, Start Num: 14
Candidate Starts for Emmaloid_31:
(Start: 12 @27459 has 6 MA's), (Start: 14 @27477 has 229 MA's), (20, 27585),

Gene: Empress_30 Start: 27432, Stop: 27665, Start Num: 14
Candidate Starts for Empress_30:
(Start: 14 @27432 has 229 MA's), (20, 27540),

Gene: Enby_30 Start: 25936, Stop: 26169, Start Num: 14
Candidate Starts for Enby_30:
(Start: 9 @25894 has 18 MA's), (Start: 12 @25915 has 6 MA's), (Start: 14 @25936 has 229 MA's), (17, 25966), (20, 26044), (23, 26101),

Gene: Enzomatic_33 Start: 26275, Stop: 26508, Start Num: 14
Candidate Starts for Enzomatic_33:
(6, 26122), (Start: 10 @26236 has 10 MA's), (Start: 14 @26275 has 229 MA's), (20, 26383), (23, 26440),

Gene: Eradicator_29 Start: 26125, Stop: 26358, Start Num: 14
Candidate Starts for Eradicator_29:
(7, 25990), (Start: 14 @26125 has 229 MA's), (20, 26233),

Gene: Estave1_27 Start: 25537, Stop: 25770, Start Num: 14
Candidate Starts for Estave1_27:
(Start: 14 @25537 has 229 MA's), (20, 25645),

Gene: Fancypants_29 Start: 26105, Stop: 26338, Start Num: 14
Candidate Starts for Fancypants_29:
(6, 25952), (Start: 8 @26063 has 1 MA's), (Start: 10 @26066 has 10 MA's), (Start: 14 @26105 has 229 MA's), (20, 26213), (23, 26270),

Gene: Fastidio_31 Start: 26410, Stop: 26643, Start Num: 14
Candidate Starts for Fastidio_31:
(Start: 14 @26410 has 229 MA's), (20, 26518), (23, 26575),

Gene: Filuzino_29 Start: 26094, Stop: 26327, Start Num: 14
Candidate Starts for Filuzino_29:
(6, 25941), (Start: 14 @26094 has 229 MA's), (20, 26202), (23, 26259),

Gene: Firehouse51_30 Start: 26777, Stop: 27049, Start Num: 10
Candidate Starts for Firehouse51_30:
(6, 26663), (Start: 10 @26777 has 10 MA's), (Start: 14 @26816 has 229 MA's), (17, 26846), (20, 26924),

Gene: Flathead_29 Start: 26132, Stop: 26365, Start Num: 14
Candidate Starts for Flathead_29:
(6, 25979), (Start: 14 @26132 has 229 MA's), (20, 26240), (23, 26297),

Gene: Florinda_29 Start: 26097, Stop: 26330, Start Num: 14
Candidate Starts for Florinda_29:
(Start: 14 @26097 has 229 MA's), (20, 26205), (23, 26262),

Gene: FreddyB_29 Start: 26283, Stop: 26516, Start Num: 14
Candidate Starts for FreddyB_29:
(Start: 14 @26283 has 229 MA's), (20, 26391),

Gene: Fruitloop_28 Start: 26288, Stop: 26521, Start Num: 14
Candidate Starts for Fruitloop_28:
(6, 26135), (Start: 14 @26288 has 229 MA's), (20, 26396), (23, 26453),

Gene: GUmbie_29 Start: 26096, Stop: 26347, Start Num: 12
Candidate Starts for GUmbie_29:
(5, 25940), (Start: 12 @26096 has 6 MA's), (Start: 14 @26114 has 229 MA's), (20, 26222),

Gene: Galactic_29 Start: 26135, Stop: 26356, Start Num: 14
Candidate Starts for Galactic_29:
(Start: 14 @26135 has 229 MA's), (17, 26165), (20, 26243),

Gene: Gandalph_29 Start: 26198, Stop: 26419, Start Num: 14
Candidate Starts for Gandalph_29:
(6, 26045), (Start: 14 @26198 has 229 MA's), (20, 26306),

Gene: Geralt_29 Start: 26097, Stop: 26330, Start Num: 14
Candidate Starts for Geralt_29:
(Start: 8 @26055 has 1 MA's), (Start: 10 @26058 has 10 MA's), (Start: 14 @26097 has 229 MA's), (20, 26205), (23, 26262),

Gene: Gex_27 Start: 22561, Stop: 22833, Start Num: 9
Candidate Starts for Gex_27:

(Start: 9 @22561 has 18 MA's), (Start: 10 @22564 has 10 MA's), (Start: 14 @22597 has 229 MA's), (16, 22615),

Gene: GigiOuiOui_29 Start: 26226, Stop: 26459, Start Num: 14
Candidate Starts for GigiOuiOui_29:
(Start: 14 @26226 has 229 MA's), (20, 26334),

Gene: Girafales_30 Start: 25905, Stop: 26138, Start Num: 14
Candidate Starts for Girafales_30:
(Start: 14 @25905 has 229 MA's), (20, 26013), (23, 26070),

Gene: Girr_29 Start: 26056, Stop: 26277, Start Num: 14
Candidate Starts for Girr_29:
(5, 25897), (Start: 14 @26056 has 229 MA's), (20, 26164),

Gene: Gorge_29 Start: 26250, Stop: 26483, Start Num: 14
Candidate Starts for Gorge_29:
(Start: 14 @26250 has 229 MA's), (20, 26358),

Gene: Grimmer_31 Start: 26819, Stop: 27052, Start Num: 14
Candidate Starts for Grimmer_31:
(7, 26684), (Start: 14 @26819 has 229 MA's), (20, 26927),

Gene: Guppsters_30 Start: 26365, Stop: 26586, Start Num: 14
Candidate Starts for Guppsters_30:
(7, 26230), (Start: 14 @26365 has 229 MA's), (20, 26473),

Gene: Hamulus_29 Start: 26232, Stop: 26483, Start Num: 12
Candidate Starts for Hamulus_29:
(7, 26112), (Start: 12 @26232 has 6 MA's), (Start: 14 @26250 has 229 MA's), (20, 26358),

Gene: Harley_29 Start: 26034, Stop: 26267, Start Num: 14
Candidate Starts for Harley_29:
(2, 25809), (7, 25899), (Start: 14 @26034 has 229 MA's), (17, 26064), (20, 26142),

Gene: Hegedechwinu_30 Start: 26115, Stop: 26348, Start Num: 14
Candidate Starts for Hegedechwinu_30:
(3, 25896), (Start: 14 @26115 has 229 MA's), (17, 26145), (20, 26223),

Gene: Hlubikazi_29 Start: 26357, Stop: 26590, Start Num: 14
Candidate Starts for Hlubikazi_29:
(6, 26204), (Start: 14 @26357 has 229 MA's), (20, 26465), (23, 26522),

Gene: IMpilo_28 Start: 25884, Stop: 26120, Start Num: 14
Candidate Starts for IMpilo_28:
(6, 25728), (Start: 10 @25845 has 10 MA's), (Start: 14 @25884 has 229 MA's), (20, 25992),

Gene: IbOuu_30 Start: 26113, Stop: 26346, Start Num: 14
Candidate Starts for IbOuu_30:
(6, 25960), (Start: 10 @26074 has 10 MA's), (Start: 14 @26113 has 229 MA's), (20, 26221), (23, 26278),

Gene: Ibhubesi_29 Start: 26041, Stop: 26274, Start Num: 14

Candidate Starts for Ibhubesi_29:
(2, 25816), (7, 25906), (Start: 14 @26041 has 229 MA's), (17, 26071), (20, 26149),

Gene: Inventum_29 Start: 26214, Stop: 26447, Start Num: 14
Candidate Starts for Inventum_29:
(Start: 14 @26214 has 229 MA's), (17, 26244), (20, 26322), (23, 26379),

Gene: IrishSherpFalk_30 Start: 27450, Stop: 27671, Start Num: 14
Candidate Starts for IrishSherpFalk_30:
(3, 27231), (Start: 14 @27450 has 229 MA's), (20, 27558),

Gene: JalFarm20_31 Start: 26636, Stop: 26869, Start Num: 14
Candidate Starts for JalFarm20_31:
(6, 26483), (Start: 10 @26597 has 10 MA's), (Start: 14 @26636 has 229 MA's), (20, 26744), (23, 26801),

Gene: James_29 Start: 26246, Stop: 26479, Start Num: 14
Candidate Starts for James_29:
(Start: 14 @26246 has 229 MA's), (20, 26354),

Gene: Jant_30 Start: 26266, Stop: 26499, Start Num: 14
Candidate Starts for Jant_30:
(6, 26113), (Start: 10 @26227 has 10 MA's), (Start: 14 @26266 has 229 MA's), (20, 26374), (23, 26431),

Gene: Jarcob_29 Start: 26281, Stop: 26556, Start Num: 14
Candidate Starts for Jarcob_29:
(Start: 14 @26281 has 229 MA's), (19, 26389), (20, 26431), (23, 26488),

Gene: Jennelsea_23 Start: 22229, Stop: 22468, Start Num: 14
Candidate Starts for Jennelsea_23:
(Start: 14 @22229 has 229 MA's), (18, 22265), (21, 22373),

Gene: Jinglebell_28 Start: 26305, Stop: 26538, Start Num: 14
Candidate Starts for Jinglebell_28:
(Start: 14 @26305 has 229 MA's), (20, 26413), (21, 26446),

Gene: Job42_32 Start: 27828, Stop: 28049, Start Num: 14
Candidate Starts for Job42_32:
(6, 27675), (Start: 14 @27828 has 229 MA's), (20, 27936),

Gene: JoeyJr_29 Start: 26264, Stop: 26497, Start Num: 14
Candidate Starts for JoeyJr_29:
(Start: 14 @26264 has 229 MA's), (20, 26372),

Gene: Journey_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Journey_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Juice456_30 Start: 27386, Stop: 27619, Start Num: 14
Candidate Starts for Juice456_30:
(3, 27167), (Start: 14 @27386 has 229 MA's), (17, 27416), (20, 27494),

Gene: Juniper1_29 Start: 26063, Stop: 26296, Start Num: 14
Candidate Starts for Juniper1_29:
(7, 25928), (Start: 14 @26063 has 229 MA's), (20, 26171),

Gene: Karhdo_29 Start: 26228, Stop: 26461, Start Num: 14
Candidate Starts for Karhdo_29:
(Start: 14 @26228 has 229 MA's), (20, 26336),

Gene: Kenuha5_26 Start: 25252, Stop: 25485, Start Num: 14
Candidate Starts for Kenuha5_26:
(5, 25084), (Start: 10 @25213 has 10 MA's), (Start: 14 @25252 has 229 MA's), (20, 25360),

Gene: Kersh_28 Start: 27304, Stop: 27537, Start Num: 14
Candidate Starts for Kersh_28:
(Start: 14 @27304 has 229 MA's), (20, 27412),

Gene: Kimberlium_31 Start: 27224, Stop: 27457, Start Num: 14
Candidate Starts for Kimberlium_31:
(5, 27056), (Start: 10 @27185 has 10 MA's), (Start: 14 @27224 has 229 MA's), (20, 27332), (23, 27389),

Gene: KingJulian_29 Start: 26289, Stop: 26522, Start Num: 14
Candidate Starts for KingJulian_29:
(Start: 8 @26247 has 1 MA's), (Start: 10 @26250 has 10 MA's), (Start: 14 @26289 has 229 MA's), (20, 26397), (23, 26454),

Gene: KingMidas_30 Start: 27392, Stop: 27625, Start Num: 14
Candidate Starts for KingMidas_30:
(Start: 14 @27392 has 229 MA's), (20, 27500),

Gene: Kingsley_27 Start: 25079, Stop: 25312, Start Num: 14
Candidate Starts for Kingsley_27:
(6, 24926), (Start: 10 @25040 has 10 MA's), (Start: 14 @25079 has 229 MA's), (20, 25187), (23, 25244),

Gene: Koella_23 Start: 22241, Stop: 22480, Start Num: 14
Candidate Starts for Koella_23:
(Start: 14 @22241 has 229 MA's), (18, 22277), (21, 22385),

Gene: Krakatau_30 Start: 26773, Stop: 27009, Start Num: 14
Candidate Starts for Krakatau_30:
(Start: 14 @26773 has 229 MA's), (20, 26881),

Gene: KristaRAM_30 Start: 26945, Stop: 27178, Start Num: 14
Candidate Starts for KristaRAM_30:
(6, 26792), (Start: 14 @26945 has 229 MA's), (20, 27053), (23, 27110),

Gene: LastJedi_23 Start: 22272, Stop: 22511, Start Num: 14
Candidate Starts for LastJedi_23:
(Start: 14 @22272 has 229 MA's), (18, 22308), (21, 22416),

Gene: Latretium_30 Start: 26907, Stop: 27140, Start Num: 14

Candidate Starts for Latretium_30:
(11, 26868), (Start: 12 @26883 has 6 MA's), (Start: 14 @26907 has 229 MA's), (20, 27015),

Gene: Leozinho_30 Start: 25956, Stop: 26189, Start Num: 14
Candidate Starts for Leozinho_30:
(Start: 8 @25914 has 1 MA's), (Start: 10 @25917 has 10 MA's), (Start: 14 @25956 has 229 MA's), (20, 26064), (23, 26121),

Gene: Leperchaun_29 Start: 26152, Stop: 26388, Start Num: 14
Candidate Starts for Leperchaun_29:
(7, 26017), (Start: 14 @26152 has 229 MA's), (17, 26182), (20, 26260), (23, 26317),

Gene: LilMoolah_29 Start: 26371, Stop: 26604, Start Num: 14
Candidate Starts for LilMoolah_29:
(Start: 14 @26371 has 229 MA's), (20, 26479), (23, 26536),

Gene: LilSpotty_30 Start: 23533, Stop: 23808, Start Num: 9
Candidate Starts for LilSpotty_30:
(Start: 9 @23533 has 18 MA's), (Start: 10 @23536 has 10 MA's), (Start: 14 @23569 has 229 MA's), (16, 23587), (21, 23713),

Gene: LittleShirley_31 Start: 27497, Stop: 27718, Start Num: 14
Candidate Starts for LittleShirley_31:
(Start: 13 @27479 has 1 MA's), (Start: 14 @27497 has 229 MA's), (20, 27605),

Gene: Lizziana_29 Start: 26246, Stop: 26479, Start Num: 14
Candidate Starts for Lizziana_29:
(Start: 14 @26246 has 229 MA's), (20, 26354), (23, 26411),

Gene: Llama_29 Start: 26304, Stop: 26537, Start Num: 14
Candidate Starts for Llama_29:
(Start: 14 @26304 has 229 MA's), (20, 26412), (21, 26445),

Gene: Llij_29 Start: 26076, Stop: 26309, Start Num: 14
Candidate Starts for Llij_29:
(5, 25908), (Start: 10 @26037 has 10 MA's), (Start: 14 @26076 has 229 MA's), (20, 26184), (23, 26241),

Gene: LordVader_24 Start: 21306, Stop: 21545, Start Num: 14
Candidate Starts for LordVader_24:
(Start: 14 @21306 has 229 MA's), (18, 21342), (21, 21450),

Gene: Lorde_30 Start: 25911, Stop: 26144, Start Num: 14
Candidate Starts for Lorde_30:
(Start: 9 @25869 has 18 MA's), (Start: 12 @25890 has 6 MA's), (Start: 14 @25911 has 229 MA's), (17, 25941), (20, 26019), (23, 26076),

Gene: Lucia_30 Start: 26207, Stop: 26440, Start Num: 14
Candidate Starts for Lucia_30:
(Start: 8 @26165 has 1 MA's), (Start: 10 @26168 has 10 MA's), (Start: 14 @26207 has 229 MA's), (20, 26315), (23, 26372),

Gene: LunaBlu_30 Start: 26309, Stop: 26530, Start Num: 14

Candidate Starts for LunaBlu_30:
(7, 26171), (Start: 13 @26291 has 1 MA's), (Start: 14 @26309 has 229 MA's), (20, 26417),

Gene: MadMen_26 Start: 25352, Stop: 25585, Start Num: 14
Candidate Starts for MadMen_26:
(Start: 14 @25352 has 229 MA's), (20, 25460), (23, 25517),

Gene: Madiba_27 Start: 25006, Stop: 25239, Start Num: 14
Candidate Starts for Madiba_27:
(7, 24871), (Start: 14 @25006 has 229 MA's), (20, 25114),

Gene: Magsby_27 Start: 22562, Stop: 22834, Start Num: 9
Candidate Starts for Magsby_27:
(Start: 9 @22562 has 18 MA's), (Start: 10 @22565 has 10 MA's), (Start: 14 @22598 has 229 MA's), (16, 22616),

Gene: Mahavrat_29 Start: 26057, Stop: 26290, Start Num: 14
Candidate Starts for Mahavrat_29:
(Start: 12 @26039 has 6 MA's), (Start: 14 @26057 has 229 MA's), (20, 26165),

Gene: Mandlovu_29 Start: 26299, Stop: 26532, Start Num: 14
Candidate Starts for Mandlovu_29:
(6, 26146), (Start: 14 @26299 has 229 MA's), (20, 26407), (23, 26464),

Gene: Mantra_29 Start: 26195, Stop: 26428, Start Num: 14
Candidate Starts for Mantra_29:
(Start: 14 @26195 has 229 MA's), (20, 26303),

Gene: Maravista_29 Start: 26028, Stop: 26261, Start Num: 14
Candidate Starts for Maravista_29:
(Start: 14 @26028 has 229 MA's), (20, 26136), (22, 26178), (23, 26193),

Gene: Marker_30 Start: 25963, Stop: 26196, Start Num: 14
Candidate Starts for Marker_30:
(6, 25810), (Start: 14 @25963 has 229 MA's), (20, 26071), (23, 26128),

Gene: Martik_29 Start: 26273, Stop: 26506, Start Num: 14
Candidate Starts for Martik_29:
(Start: 14 @26273 has 229 MA's), (20, 26381), (23, 26438),

Gene: Mattes_29 Start: 26246, Stop: 26479, Start Num: 14
Candidate Starts for Mattes_29:
(Start: 14 @26246 has 229 MA's), (20, 26354),

Gene: Medindi_30 Start: 26110, Stop: 26343, Start Num: 14
Candidate Starts for Medindi_30:
(6, 25957), (Start: 14 @26110 has 229 MA's), (20, 26218), (23, 26275),

Gene: Melissauren88_29 Start: 26284, Stop: 26517, Start Num: 14
Candidate Starts for Melissauren88_29:
(6, 26131), (Start: 14 @26284 has 229 MA's), (20, 26392), (23, 26449),

Gene: Melville_27 Start: 22565, Stop: 22837, Start Num: 9

Candidate Starts for Melville_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: MilanaBonita_23 Start: 22215, Stop: 22448, Start Num: 14
Candidate Starts for MilanaBonita_23:
(Start: 14 @22215 has 229 MA's), (20, 22323), (23, 22380),

Gene: MilleniumForce_30 Start: 27076, Stop: 27309, Start Num: 14
Candidate Starts for MilleniumForce_30:
(6, 26923), (Start: 10 @27037 has 10 MA's), (Start: 14 @27076 has 229 MA's), (20, 27184), (23, 27241),

Gene: MinionDave_30 Start: 26467, Stop: 26688, Start Num: 14
Candidate Starts for MinionDave_30:
(7, 26329), (Start: 13 @26449 has 1 MA's), (Start: 14 @26467 has 229 MA's), (20, 26575), (24, 26668),

Gene: Minnie_30 Start: 26814, Stop: 27035, Start Num: 14
Candidate Starts for Minnie_30:
(6, 26661), (Start: 10 @26775 has 10 MA's), (Start: 14 @26814 has 229 MA's), (20, 26922),

Gene: Misha28_30 Start: 25975, Stop: 26208, Start Num: 14
Candidate Starts for Misha28_30:
(6, 25819), (Start: 10 @25936 has 10 MA's), (Start: 14 @25975 has 229 MA's), (20, 26083),

Gene: MisterCuddles_29 Start: 26056, Stop: 26277, Start Num: 14
Candidate Starts for MisterCuddles_29:
(5, 25897), (Start: 14 @26056 has 229 MA's), (20, 26164),

Gene: Modragons_29 Start: 26149, Stop: 26382, Start Num: 14
Candidate Starts for Modragons_29:
(Start: 14 @26149 has 229 MA's), (20, 26257), (21, 26290),

Gene: Moonbeam_30 Start: 26769, Stop: 27002, Start Num: 14
Candidate Starts for Moonbeam_30:
(6, 26616), (Start: 10 @26730 has 10 MA's), (Start: 14 @26769 has 229 MA's), (20, 26877), (23, 26934),

Gene: Mova_30 Start: 25966, Stop: 26199, Start Num: 14
Candidate Starts for Mova_30:
(6, 25813), (Start: 10 @25927 has 10 MA's), (Start: 14 @25966 has 229 MA's), (20, 26074),

Gene: Mozy_30 Start: 26161, Stop: 26394, Start Num: 14
Candidate Starts for Mozy_30:
(6, 26008), (Start: 14 @26161 has 229 MA's), (20, 26269),

Gene: Ms6_23 Start: 21747, Stop: 21980, Start Num: 14
Candidate Starts for Ms6_23:
(Start: 14 @21747 has 229 MA's), (20, 21855), (23, 21912),

Gene: MulchExplorer_31 Start: 27185, Stop: 27457, Start Num: 10
Candidate Starts for MulchExplorer_31:

(5, 27056), (Start: 10 @27185 has 10 MA's), (Start: 14 @27224 has 229 MA's), (20, 27332), (23, 27389),

Gene: MulchSalad_25 Start: 22396, Stop: 22632, Start Num: 14
Candidate Starts for MulchSalad_25:
(Start: 14 @22396 has 229 MA's),

Gene: Mutaforma13_29 Start: 26280, Stop: 26513, Start Num: 14
Candidate Starts for Mutaforma13_29:
(Start: 14 @26280 has 229 MA's), (20, 26388),

Gene: Mwanjiwa_29 Start: 26227, Stop: 26460, Start Num: 14
Candidate Starts for Mwanjiwa_29:
(6, 26074), (Start: 10 @26188 has 10 MA's), (Start: 14 @26227 has 229 MA's), (20, 26335),

Gene: NewHope4_31 Start: 26316, Stop: 26549, Start Num: 14
Candidate Starts for NewHope4_31:
(6, 26163), (Start: 10 @26277 has 10 MA's), (Start: 14 @26316 has 229 MA's), (20, 26424),

Gene: Nichirin_29 Start: 26252, Stop: 26485, Start Num: 14
Candidate Starts for Nichirin_29:
(Start: 14 @26252 has 229 MA's), (20, 26360),

Gene: Nimbo_29 Start: 26101, Stop: 26334, Start Num: 14
Candidate Starts for Nimbo_29:
(Start: 14 @26101 has 229 MA's), (20, 26209),

Gene: Nitzel_30 Start: 26816, Stop: 27049, Start Num: 14
Candidate Starts for Nitzel_30:
(7, 26678), (Start: 12 @26798 has 6 MA's), (Start: 14 @26816 has 229 MA's), (20, 26924),

Gene: Nivrat_29 Start: 26245, Stop: 26478, Start Num: 14
Candidate Starts for Nivrat_29:
(Start: 14 @26245 has 229 MA's), (20, 26353), (23, 26410),

Gene: NormanBulbieJr_29 Start: 26260, Stop: 26493, Start Num: 14
Candidate Starts for NormanBulbieJr_29:
(Start: 14 @26260 has 229 MA's), (20, 26368), (23, 26425),

Gene: Ochi17_27 Start: 25756, Stop: 25989, Start Num: 14
Candidate Starts for Ochi17_27:
(Start: 12 @25735 has 6 MA's), (Start: 14 @25756 has 229 MA's), (20, 25864),

Gene: OfUltron_29 Start: 26305, Stop: 26538, Start Num: 14
Candidate Starts for OfUltron_29:
(Start: 14 @26305 has 229 MA's), (20, 26413), (21, 26446),

Gene: Ogopogo_29 Start: 25437, Stop: 25688, Start Num: 12
Candidate Starts for Ogopogo_29:
(Start: 12 @25437 has 6 MA's), (Start: 14 @25455 has 229 MA's), (20, 25563),

Gene: Okabe_29 Start: 23144, Stop: 23377, Start Num: 14
Candidate Starts for Okabe_29:

(Start: 14 @23144 has 229 MA's), (17, 23174), (20, 23252),

Gene: Oksu_30 Start: 26149, Stop: 26382, Start Num: 14
Candidate Starts for Oksu_30:
(Start: 14 @26149 has 229 MA's), (20, 26257), (21, 26290),

Gene: OldBen_29 Start: 26053, Stop: 26286, Start Num: 14
Candidate Starts for OldBen_29:
(Start: 14 @26053 has 229 MA's), (20, 26161),

Gene: OlympiaSaint_29 Start: 26469, Stop: 26702, Start Num: 14
Candidate Starts for OlympiaSaint_29:
(Start: 14 @26469 has 229 MA's), (20, 26577),

Gene: Ovechkin_29 Start: 26271, Stop: 26504, Start Num: 14
Candidate Starts for Ovechkin_29:
(6, 26118), (Start: 14 @26271 has 229 MA's), (20, 26379), (23, 26436),

Gene: OwlsT2W_30 Start: 26550, Stop: 26783, Start Num: 14
Candidate Starts for OwlsT2W_30:
(6, 26397), (Start: 14 @26550 has 229 MA's), (17, 26580), (20, 26658), (23, 26715),

Gene: PHappiness_29 Start: 26074, Stop: 26307, Start Num: 14
Candidate Starts for PHappiness_29:
(Start: 12 @26056 has 6 MA's), (Start: 14 @26074 has 229 MA's), (20, 26182),

Gene: PMC_29 Start: 26076, Stop: 26309, Start Num: 14
Candidate Starts for PMC_29:
(5, 25908), (Start: 10 @26037 has 10 MA's), (Start: 14 @26076 has 229 MA's), (20, 26184), (23, 26241),

Gene: Pacc40_29 Start: 26248, Stop: 26484, Start Num: 14
Candidate Starts for Pacc40_29:
(7, 26113), (Start: 14 @26248 has 229 MA's), (17, 26278), (20, 26356), (23, 26413),

Gene: Parmesanjohn_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Parmesanjohn_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: PatoPoderoso_29 Start: 26289, Stop: 26522, Start Num: 14
Candidate Starts for PatoPoderoso_29:
(Start: 8 @26247 has 1 MA's), (Start: 10 @26250 has 10 MA's), (Start: 14 @26289 has 229 MA's), (20, 26397), (23, 26454),

Gene: Peridot_31 Start: 27356, Stop: 27577, Start Num: 14
Candidate Starts for Peridot_31:
(Start: 13 @27338 has 1 MA's), (Start: 14 @27356 has 229 MA's), (20, 27464),

Gene: Phalconet_29 Start: 26190, Stop: 26426, Start Num: 14
Candidate Starts for Phalconet_29:
(6, 26034), (Start: 10 @26151 has 10 MA's), (Start: 14 @26190 has 229 MA's), (20, 26298), (23, 26355),

Gene: Phanphagia_26 Start: 25273, Stop: 25506, Start Num: 14
Candidate Starts for Phanphagia_26:
(6, 25120), (Start: 10 @25234 has 10 MA's), (Start: 14 @25273 has 229 MA's), (20, 25381), (23, 25438),

Gene: Phasih_30 Start: 26651, Stop: 26884, Start Num: 14
Candidate Starts for Phasih_30:
(5, 26477), (Start: 12 @26633 has 6 MA's), (Start: 14 @26651 has 229 MA's), (20, 26759),

Gene: Phatniss_30 Start: 26593, Stop: 26826, Start Num: 14
Candidate Starts for Phatniss_30:
(5, 26425), (Start: 10 @26554 has 10 MA's), (Start: 14 @26593 has 229 MA's), (20, 26701), (23, 26758),

Gene: PhesterPhotato_29 Start: 26110, Stop: 26346, Start Num: 14
Candidate Starts for PhesterPhotato_29:
(6, 25954), (Start: 10 @26071 has 10 MA's), (Start: 14 @26110 has 229 MA's), (20, 26218), (23, 26275),

Gene: Philonius_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Philonius_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Philus_29 Start: 26092, Stop: 26325, Start Num: 14
Candidate Starts for Philus_29:
(Start: 14 @26092 has 229 MA's), (20, 26200),

Gene: PhlipPhlop_30 Start: 27630, Stop: 27863, Start Num: 14
Candidate Starts for PhlipPhlop_30:
(Start: 12 @27612 has 6 MA's), (Start: 14 @27630 has 229 MA's), (20, 27738),

Gene: Piper2020_31 Start: 26685, Stop: 26918, Start Num: 14
Candidate Starts for Piper2020_31:
(Start: 14 @26685 has 229 MA's), (20, 26793),

Gene: Pippy_23 Start: 22268, Stop: 22507, Start Num: 14
Candidate Starts for Pippy_23:
(Start: 14 @22268 has 229 MA's), (18, 22304), (21, 22412),

Gene: Pipsqueaks_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Pipsqueaks_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Poenanya_29 Start: 26218, Stop: 26451, Start Num: 14
Candidate Starts for Poenanya_29:
(5, 26044), (Start: 12 @26200 has 6 MA's), (Start: 14 @26218 has 229 MA's), (20, 26326),

Gene: Polka14_30 Start: 26639, Stop: 26872, Start Num: 14
Candidate Starts for Polka14_30:

(6, 26486), (Start: 10 @26600 has 10 MA's), (Start: 14 @26639 has 229 MA's), (20, 26747), (23, 26804),

Gene: Pollywog_29 Start: 26336, Stop: 26569, Start Num: 14
Candidate Starts for Pollywog_29:
(7, 26198), (Start: 14 @26336 has 229 MA's), (20, 26444),

Gene: Polo2Bam_33 Start: 26275, Stop: 26508, Start Num: 14
Candidate Starts for Polo2Bam_33:
(6, 26122), (Start: 10 @26236 has 10 MA's), (Start: 14 @26275 has 229 MA's), (20, 26383), (23, 26440),

Gene: PopTart_29 Start: 26314, Stop: 26547, Start Num: 14
Candidate Starts for PopTart_29:
(6, 26161), (Start: 10 @26275 has 10 MA's), (Start: 14 @26314 has 229 MA's), (20, 26422),

Gene: Priscilla_29 Start: 26283, Stop: 26516, Start Num: 14
Candidate Starts for Priscilla_29:
(Start: 14 @26283 has 229 MA's), (20, 26391),

Gene: QuickMath_30 Start: 27448, Stop: 27681, Start Num: 14
Candidate Starts for QuickMath_30:
(5, 27280), (Start: 10 @27409 has 10 MA's), (Start: 14 @27448 has 229 MA's), (20, 27556), (23, 27613),

Gene: Quico_30 Start: 25905, Stop: 26138, Start Num: 14
Candidate Starts for Quico_30:
(Start: 14 @25905 has 229 MA's), (20, 26013), (23, 26070),

Gene: Radiance_29 Start: 26191, Stop: 26424, Start Num: 14
Candidate Starts for Radiance_29:
(Start: 14 @26191 has 229 MA's), (20, 26299),

Gene: Ramsey_30 Start: 26130, Stop: 26351, Start Num: 14
Candidate Starts for Ramsey_30:
(Start: 14 @26130 has 229 MA's),

Gene: RedBird_29 Start: 26069, Stop: 26302, Start Num: 14
Candidate Starts for RedBird_29:
(Start: 14 @26069 has 229 MA's), (17, 26099), (20, 26177), (23, 26234),

Gene: Renaud18_29 Start: 26281, Stop: 26517, Start Num: 14
Candidate Starts for Renaud18_29:
(Start: 14 @26281 has 229 MA's), (20, 26389),

Gene: Rialto_32 Start: 28170, Stop: 28409, Start Num: 13
Candidate Starts for Rialto_32:
(Start: 13 @28170 has 1 MA's), (Start: 14 @28188 has 229 MA's), (20, 28296),

Gene: Rita_29 Start: 26094, Stop: 26315, Start Num: 14
Candidate Starts for Rita_29:
(Start: 14 @26094 has 229 MA's), (20, 26202),

Gene: RitaG_29 Start: 26298, Stop: 26519, Start Num: 14
Candidate Starts for RitaG_29:
(Start: 14 @26298 has 229 MA's), (20, 26406),

Gene: Rockne_29 Start: 26037, Stop: 26309, Start Num: 10
Candidate Starts for Rockne_29:
(5, 25908), (Start: 10 @26037 has 10 MA's), (Start: 14 @26076 has 229 MA's), (20, 26184), (23, 26241),

Gene: RockyHorror_30 Start: 26018, Stop: 26251, Start Num: 14
Candidate Starts for RockyHorror_30:
(Start: 14 @26018 has 229 MA's), (17, 26048), (20, 26126), (23, 26183),

Gene: Royals2015_29 Start: 26194, Stop: 26427, Start Num: 14
Candidate Starts for Royals2015_29:
(6, 26041), (Start: 10 @26155 has 10 MA's), (Start: 14 @26194 has 229 MA's), (20, 26302), (23, 26359),

Gene: Ruby_29 Start: 26056, Stop: 26277, Start Num: 14
Candidate Starts for Ruby_29:
(5, 25897), (Start: 14 @26056 has 229 MA's), (20, 26164),

Gene: SG4_29 Start: 26379, Stop: 26654, Start Num: 9
Candidate Starts for SG4_29:
(Start: 9 @26379 has 18 MA's), (Start: 12 @26400 has 6 MA's), (Start: 14 @26421 has 229 MA's), (17, 26451), (20, 26529), (23, 26586),

Gene: Saal_29 Start: 26070, Stop: 26303, Start Num: 14
Candidate Starts for Saal_29:
(Start: 14 @26070 has 229 MA's), (20, 26178),

Gene: Sabbb_30 Start: 26415, Stop: 26648, Start Num: 14
Candidate Starts for Sabbb_30:
(7, 26280), (Start: 14 @26415 has 229 MA's), (20, 26523), (23, 26580),

Gene: Sandalphon_30 Start: 26801, Stop: 27034, Start Num: 14
Candidate Starts for Sandalphon_30:
(Start: 14 @26801 has 229 MA's), (20, 26909),

Gene: Sarma624_24 Start: 22110, Stop: 22331, Start Num: 14
Candidate Starts for Sarma624_24:
(6, 21963), (Start: 14 @22110 has 229 MA's), (20, 22218),

Gene: Sassafras_29 Start: 26214, Stop: 26447, Start Num: 14
Candidate Starts for Sassafras_29:
(Start: 14 @26214 has 229 MA's), (17, 26244), (20, 26322), (23, 26379),

Gene: SassyB_29 Start: 26314, Stop: 26547, Start Num: 14
Candidate Starts for SassyB_29:
(6, 26161), (Start: 10 @26275 has 10 MA's), (Start: 14 @26314 has 229 MA's), (20, 26422),

Gene: Schnauzer_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Schnauzer_27:

(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Scottish_30 Start: 27397, Stop: 27630, Start Num: 14
Candidate Starts for Scottish_30:
(Start: 14 @27397 has 229 MA's), (20, 27505),

Gene: SeaLumen_32 Start: 26275, Stop: 26508, Start Num: 14
Candidate Starts for SeaLumen_32:
(6, 26122), (Start: 10 @26236 has 10 MA's), (Start: 14 @26275 has 229 MA's), (20, 26383), (23, 26440),

Gene: Seabastian_29 Start: 26305, Stop: 26538, Start Num: 14
Candidate Starts for Seabastian_29:
(Start: 14 @26305 has 229 MA's), (20, 26413), (21, 26446),

Gene: Seagreen_30 Start: 26121, Stop: 26354, Start Num: 14
Candidate Starts for Seagreen_30:
(6, 25968), (Start: 10 @26082 has 10 MA's), (Start: 14 @26121 has 229 MA's), (20, 26229), (23, 26286),

Gene: Shauna1_26 Start: 25237, Stop: 25509, Start Num: 10
Candidate Starts for Shauna1_26:
(6, 25123), (Start: 10 @25237 has 10 MA's), (Start: 14 @25276 has 229 MA's), (20, 25384), (23, 25441),

Gene: ShiLan_29 Start: 26272, Stop: 26547, Start Num: 14
Candidate Starts for ShiLan_29:
(Start: 14 @26272 has 229 MA's), (19, 26380), (20, 26422), (23, 26479),

Gene: ShowerHandel_29 Start: 26273, Stop: 26506, Start Num: 14
Candidate Starts for ShowerHandel_29:
(Start: 14 @26273 has 229 MA's), (20, 26381), (23, 26438),

Gene: ShroomBoi_26 Start: 25213, Stop: 25446, Start Num: 14
Candidate Starts for ShroomBoi_26:
(Start: 14 @25213 has 229 MA's), (17, 25243), (20, 25321), (23, 25378),

Gene: SiSi_29 Start: 26072, Stop: 26305, Start Num: 14
Candidate Starts for SiSi_29:
(Start: 14 @26072 has 229 MA's), (17, 26102), (20, 26180),

Gene: Silvafighter_27 Start: 22601, Stop: 22837, Start Num: 14
Candidate Starts for Silvafighter_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: SilverChicken_36 Start: 26023, Stop: 26256, Start Num: 14
Candidate Starts for SilverChicken_36:
(Start: 14 @26023 has 229 MA's), (17, 26053), (20, 26131), (23, 26188),

Gene: Silvy_27 Start: 22602, Stop: 22838, Start Num: 14
Candidate Starts for Silvy_27:

(Start: 9 @22566 has 18 MA's), (Start: 10 @22569 has 10 MA's), (Start: 14 @22602 has 229 MA's), (16, 22620),

Gene: SimranZ1_31 Start: 26138, Stop: 26359, Start Num: 14
Candidate Starts for SimranZ1_31:
(4, 25937), (Start: 14 @26138 has 229 MA's), (20, 26246),

Gene: Slim_31 Start: 27468, Stop: 27701, Start Num: 14
Candidate Starts for Slim_31:
(Start: 12 @27450 has 6 MA's), (Start: 14 @27468 has 229 MA's), (20, 27576),

Gene: Smurph_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Smurph_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Soul22_33 Start: 25621, Stop: 25854, Start Num: 14
Candidate Starts for Soul22_33:
(7, 25486), (Start: 14 @25621 has 229 MA's), (17, 25651), (20, 25729),

Gene: Sparkdehlily_29 Start: 26116, Stop: 26349, Start Num: 14
Candidate Starts for Sparkdehlily_29:
(Start: 14 @26116 has 229 MA's), (20, 26224),

Gene: Spartacus_30 Start: 26350, Stop: 26571, Start Num: 14
Candidate Starts for Spartacus_30:
(3, 26131), (Start: 14 @26350 has 229 MA's), (20, 26458),

Gene: Spikelee_30 Start: 26096, Stop: 26329, Start Num: 14
Candidate Starts for Spikelee_30:
(Start: 8 @26054 has 1 MA's), (Start: 14 @26096 has 229 MA's), (20, 26216),

Gene: Spoonbill_29 Start: 26280, Stop: 26513, Start Num: 14
Candidate Starts for Spoonbill_29:
(Start: 14 @26280 has 229 MA's), (20, 26388),

Gene: StAnnes_27 Start: 25835, Stop: 26068, Start Num: 14
Candidate Starts for StAnnes_27:
(Start: 12 @25814 has 6 MA's), (Start: 14 @25835 has 229 MA's), (20, 25943), (23, 26000),

Gene: Stap_30 Start: 26246, Stop: 26479, Start Num: 14
Candidate Starts for Stap_30:
(Start: 14 @26246 has 229 MA's), (20, 26354),

Gene: Starcevich_32 Start: 26394, Stop: 26627, Start Num: 14
Candidate Starts for Starcevich_32:
(Start: 14 @26394 has 229 MA's), (20, 26502), (23, 26559),

Gene: Strokeseat_29 Start: 26356, Stop: 26589, Start Num: 14
Candidate Starts for Strokeseat_29:
(6, 26203), (Start: 14 @26356 has 229 MA's), (20, 26464), (23, 26521),

Gene: SuperGrey_29 Start: 26816, Stop: 27037, Start Num: 14

Candidate Starts for SuperGrey_29:
(7, 26681), (Start: 14 @26816 has 229 MA's), (17, 26846), (20, 26924),

Gene: SwagPigglett_29 Start: 26084, Stop: 26317, Start Num: 14
Candidate Starts for SwagPigglett_29:
(Start: 14 @26084 has 229 MA's), (20, 26192), (23, 26249),

Gene: TDanisky_29 Start: 26116, Stop: 26349, Start Num: 14
Candidate Starts for TDanisky_29:
(Start: 14 @26116 has 229 MA's), (20, 26224),

Gene: Taj_29 Start: 26262, Stop: 26534, Start Num: 10
Candidate Starts for Taj_29:
(6, 26148), (Start: 10 @26262 has 10 MA's), (Start: 14 @26301 has 229 MA's), (20, 26409), (23, 26466),

Gene: Tapioca_27 Start: 22601, Stop: 22837, Start Num: 14
Candidate Starts for Tapioca_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Tchotchke_28 Start: 25457, Stop: 25678, Start Num: 14
Candidate Starts for Tchotchke_28:
(Start: 14 @25457 has 229 MA's), (20, 25565),

Gene: Tessdabest_26 Start: 22598, Stop: 22834, Start Num: 14
Candidate Starts for Tessdabest_26:
(Start: 9 @22562 has 18 MA's), (Start: 10 @22565 has 10 MA's), (Start: 14 @22598 has 229 MA's), (16, 22616),

Gene: ThetaBob_28 Start: 25464, Stop: 25697, Start Num: 14
Candidate Starts for ThetaBob_28:
(Start: 14 @25464 has 229 MA's), (20, 25572),

Gene: TootsiePop_30 Start: 25975, Stop: 26208, Start Num: 14
Candidate Starts for TootsiePop_30:
(6, 25819), (Start: 10 @25936 has 10 MA's), (Start: 14 @25975 has 229 MA's), (20, 26083),

Gene: Tootsieroll_30 Start: 26142, Stop: 26375, Start Num: 14
Candidate Starts for Tootsieroll_30:
(Start: 14 @26142 has 229 MA's), (17, 26172), (20, 26250), (23, 26307),

Gene: Topiatin_32 Start: 26766, Stop: 26999, Start Num: 14
Candidate Starts for Topiatin_32:
(7, 26631), (Start: 14 @26766 has 229 MA's), (20, 26874),

Gene: Tortoise12_27 Start: 22565, Stop: 22837, Start Num: 9
Candidate Starts for Tortoise12_27:
(Start: 9 @22565 has 18 MA's), (Start: 10 @22568 has 10 MA's), (Start: 14 @22601 has 229 MA's), (16, 22619),

Gene: Totinger_30 Start: 26000, Stop: 26233, Start Num: 14
Candidate Starts for Totinger_30:

(Start: 14 @26000 has 229 MA's), (20, 26108),

Gene: Tweety_29 Start: 26263, Stop: 26535, Start Num: 10
Candidate Starts for Tweety_29:
(6, 26149), (Start: 10 @26263 has 10 MA's), (Start: 14 @26302 has 229 MA's), (20, 26410), (23, 26467),

Gene: UncleRicky_32 Start: 27370, Stop: 27642, Start Num: 10
Candidate Starts for UncleRicky_32:
(5, 27241), (Start: 10 @27370 has 10 MA's), (Start: 14 @27409 has 229 MA's), (20, 27517), (23, 27574),

Gene: VRedHorse_29 Start: 26309, Stop: 26542, Start Num: 14
Candidate Starts for VRedHorse_29:
(6, 26156), (Start: 10 @26270 has 10 MA's), (Start: 14 @26309 has 229 MA's), (20, 26417), (23, 26474),

Gene: Velveteen_24 Start: 22110, Stop: 22331, Start Num: 14
Candidate Starts for Velveteen_24:
(6, 21963), (Start: 14 @22110 has 229 MA's), (20, 22218),

Gene: Veteran_29 Start: 26114, Stop: 26347, Start Num: 14
Candidate Starts for Veteran_29:
(5, 25940), (Start: 12 @26096 has 6 MA's), (Start: 14 @26114 has 229 MA's), (20, 26222),

Gene: Violac_30 Start: 26802, Stop: 27035, Start Num: 14
Candidate Starts for Violac_30:
(6, 26649), (Start: 10 @26763 has 10 MA's), (Start: 14 @26802 has 229 MA's), (20, 26910), (23, 26967),

Gene: Vivum_29 Start: 26083, Stop: 26316, Start Num: 14
Candidate Starts for Vivum_29:
(Start: 14 @26083 has 229 MA's), (17, 26113), (20, 26191),

Gene: Wachhund_29 Start: 26256, Stop: 26489, Start Num: 14
Candidate Starts for Wachhund_29:
(Start: 14 @26256 has 229 MA's), (20, 26364),

Gene: Wee_30 Start: 26800, Stop: 27072, Start Num: 10
Candidate Starts for Wee_30:
(6, 26686), (Start: 10 @26800 has 10 MA's), (Start: 14 @26839 has 229 MA's), (20, 26947), (23, 27004),

Gene: Whatsapiecost_29 Start: 26282, Stop: 26503, Start Num: 14
Candidate Starts for Whatsapiecost_29:
(Start: 14 @26282 has 229 MA's), (20, 26390),

Gene: Whouxphf_29 Start: 26348, Stop: 26569, Start Num: 14
Candidate Starts for Whouxphf_29:
(5, 26180), (Start: 10 @26309 has 10 MA's), (Start: 14 @26348 has 229 MA's), (20, 26456),

Gene: WillSterrel_30 Start: 27483, Stop: 27704, Start Num: 14
Candidate Starts for WillSterrel_30:

(3, 27264), (Start: 14 @27483 has 229 MA's), (20, 27591),

Gene: XFactor_29 Start: 26256, Stop: 26492, Start Num: 14
Candidate Starts for XFactor_29:
(6, 26103), (Start: 10 @26217 has 10 MA's), (Start: 14 @26256 has 229 MA's), (20, 26364), (23, 26421),

Gene: Xerxes_27 Start: 22562, Stop: 22834, Start Num: 9
Candidate Starts for Xerxes_27:
(Start: 9 @22562 has 18 MA's), (Start: 10 @22565 has 10 MA's), (Start: 14 @22598 has 229 MA's), (16, 22616),

Gene: Yorick_29 Start: 26271, Stop: 26504, Start Num: 14
Candidate Starts for Yorick_29:
(Start: 14 @26271 has 229 MA's), (20, 26379), (23, 26436),

Gene: Zerg_29 Start: 26127, Stop: 26360, Start Num: 14
Candidate Starts for Zerg_29:
(Start: 14 @26127 has 229 MA's), (17, 26157), (20, 26235), (23, 26292),

Gene: Zizzle_29 Start: 26215, Stop: 26448, Start Num: 14
Candidate Starts for Zizzle_29:
(Start: 14 @26215 has 229 MA's), (20, 26323), (23, 26380),