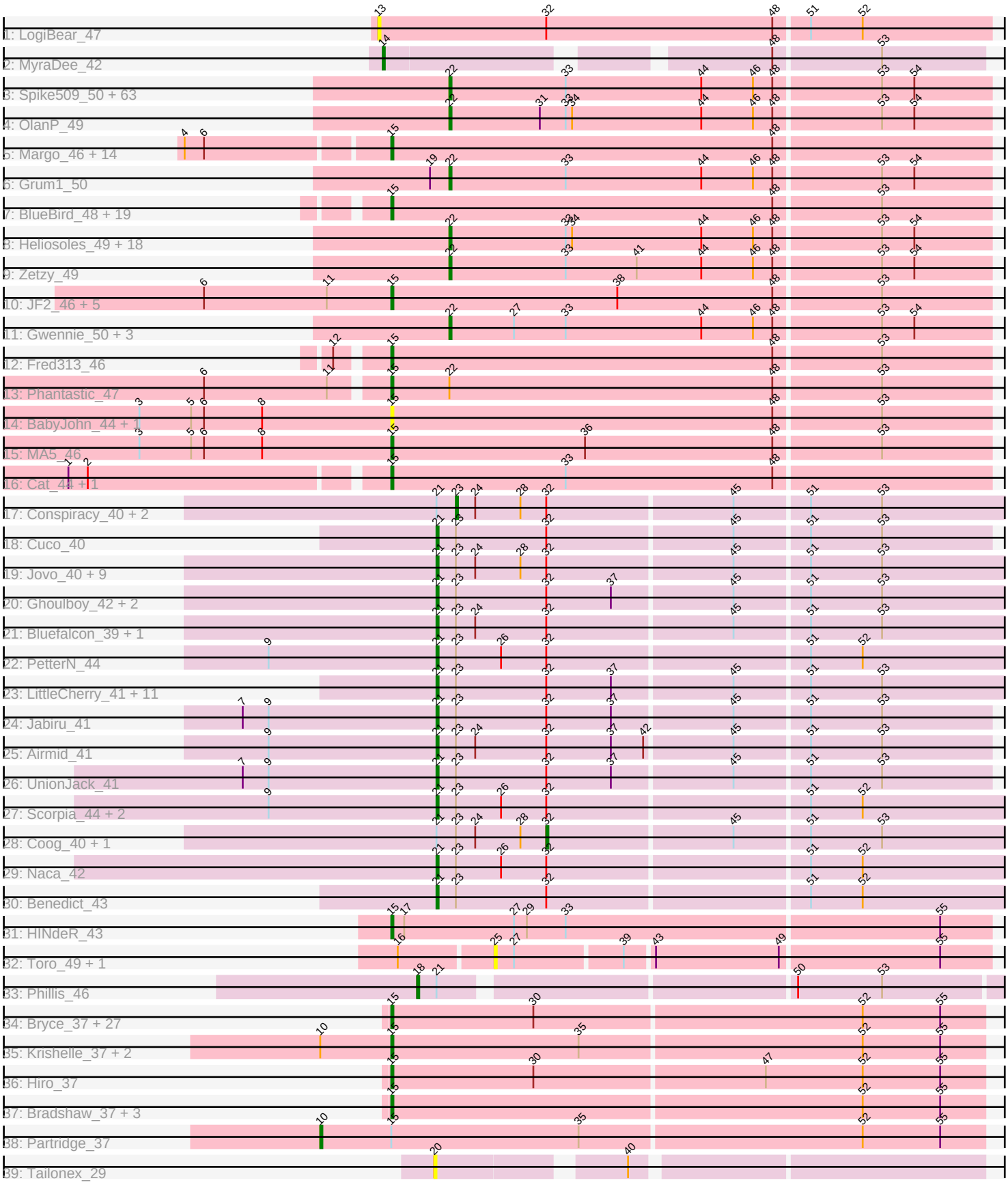
# Pham 347244


1: LogiBear_47
2: MyraDee_42
3: Spike509_50 + 63
4: OlanP_49
5: Margo_46 + 14
6: Grum1_50
7: BlueBird_48 + 19
8: Heliosoles_49 + 18
9: Zetzy_49
10: JF2_46 + 5
11: Gwennie_50 + 3
12: Fred313_46
13: Phantastic_47
14: BabyJohn_44 + 1
15: MA5_46
16: Cat_44 +1
17: Conspiracy_40 + 2
18: Cuco_40
19: Jovo_40 + 9
20: Ghoulboy_42 + 2
21: Bluefalcon_39 + 1
22: PetterN_44
23: LittleCherry_41 + 11
24: Jabiru_41
25: Airmid_41
26: UnionJack_41
27: Scorpia_44 + 2
28: Coog_40 + 1
29: Naca_42
30: Benedict_43
31: HINdeR_43
32: Toro_49 + 1
33: Phillis_46
34: Bryce_37 + 27
35: Krishelle_37 + 2
36: Hiro_37
37: Bradshaw_37 + 3
38: Partridge_37
39: Tailonex_29

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 347244 Report

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

Pham number 347244 has 224 members, 20 are drafts.

Phages represented in each track:
• Track 1 : LogiBear_47
• Track 2 : MyraDee_42
• Track 3 : Spike509_50, PotatoSplit_52, Lowa_50, Sabia_50, Ollie_50, Lilith_51, Bigflo_50, JHC117_50, Aglet_51, Hercules11_50, Microwolf_50, MarQuardt_50, SoYo_50, Taurus_51, BreSam8_50, Watson_50, DaHudson_50, LBerry_51, Snickers_50, MadMarie_50, StepMih_50, P28Green_51, Croquant_51, Fernando_50, Malinsilva_52, AgronaGT15_49, GtownJaz_50, Dieselweasel_51, Methuselah_47, AugsMagnumOpus_53, BuzzBuzz_48, Vix_50, Grif_50, Colbster_50, Anubis_53, Misomonster_51, TinyPebbles_49, Rummer_49, Stagni_50, Bxz2_46, Louie6_49, Soshari_52, MoneyMay_50, GingkoMaracino_50, LugYA_53, Pembroke_50, Tiffany_50, HashRod_51, Marie_50, Sabinator_49, Montavir_49, Mainiac_50, PGHhamlin_52, Phoebe_51, Daishi_49, Cullens_50, MuchMore_53, Farber_50, KADY_50, Phoxy_50, Grub_50, JenCasNa_51, Wooldri_52, LarryKay_50
• Track 4 : OlanP_49
• Track 5 : Margo_46, EtoileNova_47, Panamaxus_44, Lambert1_46, Texage_45, Caviar_46, QuinnKiro_45, Pocahontas_46, Norbert_45, Hookmount_46, Veracruz_45, Todacoro_46, Popcicle_46, Noella_46, ResDef_46
• Track 6 : Grum1_50
• Track 7 : BlueBird_48, Goose1X_46, Giroux_48, Zarafa_46, Heathen_46, Bugatti_48, Kachowdy_46, Marchesa_46, Roimos_46, Idleandcovert_47, SaturnRing_47, Goose1D_40, DropBear_46, Shep_46, Clammy_48, Pistachio_48, Puppy_48, TNguyen7_47, HelDan_46, Scout_46
• Track 8 : Heliosoles_49, Kalnoky_51, ACFishhook_49, Pawn_50, Phranny_51, Marius_51, HaveUMetTed_51, Jobu08_49, Gemma_49, Groupthink_51, PurpleHaze_50, Calvinny_50, Manu_50, PhishRPhriends_48, Kalb97_51, JeppNRM_51, Reba_50, ClownCar_50, SoilDragon_50
• Track 9 : Zetzy_49
• Track 10 : JF2_46, JF4_46, MK4_46, Isca_45, B1_43, Rockstar_46
• Track 11 : Gwennie_50, Beauxregard13_50, Penny1_51, EpicPhail_51
• Track 12 : Fred313_46
• Track 13 : Phantastic_47
• Track 14 : BabyJohn_44, Chiqui_44
• Track 15 : MA5_46
• Track 16 : Cat_44, BabyRay_46
• Track 17 : Conspiracy_40, Tiger_39, Theia_38
• Track 18 : Cuco_40

• Track 19 : Jovo_40, Discoknowium_39, Lev2_40, Aragog_39, AgentM_39, Phlorence_39, PickleBack_40, ForGetIt_40, Archetta_40, Twigg_41
• Track 20 : Ghoulboy_42, SydNat_42, Zolita_41
• Track 21 : Bluefalcon_39, MarysWell_39
• Track 22 : PetterN_44
• Track 23 : LittleCherry_41, HuhtaEnerson15_41, Florence4_40, George_40, Florence1_39, Tarynearal_39, Bonamassa_41, Dublin_39, Milcery_41, Swirley_43, Micasa_42, Prinashe11_40
• Track 24 : Jabiru_41
• Track 25 : Airmid_41
• Track 26 : UnionJack_41
• Track 27 : Scorpia_44, Chadwick_44, ElTiger69_42
• Track 28 : Coog_40, Midas2_40
• Track 29 : Naca_42
• Track 30 : Benedict_43
• Track 31 : HINdeR_43
• Track 32 : Toro_49, FlyCatcher_51
• Track 33 : Phillis_46
• Track 34 : Bryce_37, Swann_37, CosmicSans_37, AngryOrchard_35, RER2_30, Natosaleda_37, BobbyDazzler_37, Rasputin_37, Lillie_37, Erik_37, Nancinator_37, Rhodalysa_37, TWAMP_37, Shuman_37, Espica_37, Jester_37, Alpacados_36, Takoda_37, Yoncess_37, Phrankenstein_37, RexFury_37, PhailMary_36, Belenaria_37, UhSalsa_37, Bonanza_37, Yogi_37, Gollum_37, Harlequin_37
• Track 35 : Krishelle_37, Dinger_37, AppleCloud_35
• Track 36 : Hiro_37
• Track 37 : Bradshaw_37, StCroix_37, Naiad_37, Alatin_37
• Track 38 : Partridge_37
• Track 39 : Tailonex_29

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

The start number called the most often in the published annotations is 22, it was called in 88 of the 204 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ACFishhook_49, Aglet_51, AgronaGT15_49, Anubis_53, AugsMagnumOpus_53, Beauxregard13_50, Bigflo_50, BreSam8_50, BuzzBuzz_48, Bxz2_46, Calvinny_50, ClownCar_50, Colbster_50, Croquant_51, Cullens_50, DaHudson_50, Daishi_49, Dieselweasel_51, EpicPhail_51, Farber_50, Fernando_50, Gemma_49, GingkoMaracino_50, Grif_50, Groupthink_51, Grub_50, Grum1_50, GtownJaz_50, Gwennie_50, HashRod_51, HaveUMetTed_51, Heliosoles_49, Hercules11_50, JHC117_50, JenCasNa_51, JeppNRM_51, Jobu08_49, KADY_50, Kalb97_51, Kalnoky_51, LBerry_51, LarryKay_50, Lilith_51, Louie6_49, Lowa_50, LugYA_53, MadMarie_50, Mainiac_50, Malinsilva_52, Manu_50, MarQuardt_50, Marie_50, Marius_51, Methuselah_47, Microwolf_50, Misomonster_51, MoneyMay_50, Montavir_49, MuchMore_53, OlanP_49, Ollie_50, P28Green_51, PGHhamlin_52, Pawn_50, Pembroke_50, Penny1_51, PhishRPhriends_48, Phoebe_51, Phoxy_50, Phranny_51, PotatoSplit_52, PurpleHaze_50, Reba_50, Rummer_49, Sabia_50, Sabinator_49, Snickers_50, SoYo_50, SoilDragon_50, Soshari_52, Spike509_50, Stagni_50, StepMih_50, Taurus_51, Tiffany_50, TinyPebbles_49, Vix_50,

Watson_50, Wooldri_52, Zetzy_49,

Genes that have the "Most Annotated" start but do not call it:
• Phantastic_47,

Genes that do not have the "Most Annotated" start:
• AgentM_39, Airmid_41, Alatin_37, Alpacados_36, AngryOrchard_35, AppleCloud_35, Aragog_39, Archetta_40, B1_43, BabyJohn_44, BabyRay_46, Belenaria_37, Benedict_43, BlueBird_48, Bluefalcon_39, BobbyDazzler_37, Bonamassa_41, Bonanza_37, Bradshaw_37, Bryce_37, Bugatti_48, Cat_44, Caviar_46, Chadwick_44, Chiqui_44, Clammy_48, Conspiracy_40, Coog_40, CosmicSans_37, Cuco_40, Dinger_37, Discoknowium_39, DropBear_46, Dublin_39, ElTiger69_42, Erik_37, Espica_37, EtoileNova_47, Florence1_39, Florence4_40, FlyCatcher_51, ForGetIt_40, Fred313_46, George_40, Ghoulboy_42, Giroux_48, Gollum_37, Goose1D_40, Goose1X_46, HINdeR_43, Harlequin_37, Heathen_46, HelDan_46, Hiro_37, Hookmount_46, HuhtaEnerson15_41, Idleandcovert_47, Isca_45, JF2_46, JF4_46, Jabiru_41, Jester_37, Jovo_40, Kachowdy_46, Krishelle_37, Lambert1_46, Lev2_40, Lillie_37, LittleCherry_41, LogiBear_47, MA5_46, MK4_46, Marchesa_46, Margo_46, MarysWell_39, Micasa_42, Midas2_40, Milcery_41, MyraDee_42, Naca_42, Naiad_37, Nancinator_37, Natosaleda_37, Noella_46, Norbert_45, Panamaxus_44, Partridge_37, PetterN_44, PhailMary_36, Phillis_46, Phlorence_39, Phrankenstein_37, PickleBack_40, Pistachio_48, Pocahontas_46, Popcicle_46, Prinashe11_40, Puppy_48, QuinnKiro_45, RER2_30, Rasputin_37, ResDef_46, RexFury_37, Rhodalysa_37, Rockstar_46, Roimos_46, SaturnRing_47, Scorpia_44, Scout_46, Shep_46, Shuman_37, StCroix_37, Swann_37, Swirley_43, SydNat_42, TNguyen7_47, TWAMP_37, Tailonex_29, Takoda_37, Tarynearal_39, Texage_45, Theia_38, Tiger_39, Todacoro_46, Toro_49, Twigg_41, UhSalsa_37, UnionJack_41, Veracruz_45, Yogi_37, Yoncess_37, Zarafa_46, Zolita_41,

**Summary by start number:**

Start 10:
• Found in 4 of 224 ( 1.8% ) of genes in pham
• Manual Annotations of this start: 1 of 204
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Partridge_37 (CA),

Start 13:
• Found in 1 of 224 ( 0.4% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LogiBear_47 (A15),

Start 14:
• Found in 1 of 224 ( 0.4% ) of genes in pham
• Manual Annotations of this start: 1 of 204
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MyraDee_42 (A18),

Start 15:
• Found in 86 of 224 ( 38.4% ) of genes in pham
• Manual Annotations of this start: 73 of 204

• Called 98.8% of time when present
• Phage (with cluster) where this start called: Alatin_37 (CA), Alpacados_36 (CA), AngryOrchard_35 (CA), AppleCloud_35 (CA), B1_43 (A3), BabyJohn_44 (A3), BabyRay_46 (A3), Belenaria_37 (CA), BlueBird_48 (A3), BobbyDazzler_37 (CA), Bonanza_37 (CA), Bradshaw_37 (CA), Bryce_37 (CA), Bugatti_48 (A3), Cat_44 (A3), Caviar_46 (A3), Chiqui_44 (A3), Clammy_48 (A3), CosmicSans_37 (CA), Dinger_37 (CA), DropBear_46 (A3), Erik_37 (CA), Espica_37 (CA), EtoileNova_47 (A3), Fred313_46 (A3), Giroux_48 (A3), Gollum_37 (CA), Goose1D_40 (A3), Goose1X_46 (A3), HINdeR_43 (A7), Harlequin_37 (CA), Heathen_46 (A3), HelDan_46 (A3), Hiro_37 (CA), Hookmount_46 (A3), Idleandcovert_47 (A3), Isca_45 (A3), JF2_46 (A3), JF4_46 (A3), Jester_37 (CA), Kachowdy_46 (A3), Krishelle_37 (CA), Lambert1_46 (A3), Lillie_37 (CA), MA5_46 (A3), MK4_46 (A3), Marchesa_46 (A3), Margo_46 (A3), Naiad_37 (CA), Nancinator_37 (CA), Natosaleda_37 (CA), Noella_46 (A3), Norbert_45 (A3), Panamaxus_44 (A3), PhailMary_36 (CA), Phantastic_47 (A3), Phrankenstein_37 (CA), Pistachio_48 (A3), Pocahontas_46 (A3), Popcicle_46 (A3), Puppy_48 (A3), QuinnKiro_45 (A3), RER2_30 (CA), Rasputin_37 (CA), ResDef_46 (A3), RexFury_37 (CA), Rhodalysa_37 (CA), Rockstar_46 (A3), Roimos_46 (A3), SaturnRing_47 (A3), Scout_46 (A3), Shep_46 (A3), Shuman_37 (CA), StCroix_37 (CA), Swann_37 (CA), TNguyen7_47 (A3), TWAMP_37 (CA), Takoda_37 (CA), Texage_45 (A3), Todacoro_46 (A3), UhSalsa_37 (CA), Veracruz_45 (A3), Yogi_37 (CA), Yoncess_37 (CA), Zarafa_46 (A3),

Start 18:
• Found in 1 of 224 ( 0.4% ) of genes in pham
• Manual Annotations of this start: 1 of 204
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phillis_46 (A8),

Start 20:
• Found in 1 of 224 ( 0.4% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Tailonex_29 (singleton),

Start 21:
• Found in 43 of 224 ( 19.2% ) of genes in pham
• Manual Annotations of this start: 35 of 204
• Called 86.0% of time when present
• Phage (with cluster) where this start called: AgentM_39 (A5), Airmid_41 (A5), Aragog_39 (A5), Archetta_40 (A5), Benedict_43 (A5), Bluefalcon_39 (A5), Bonamassa_41 (A5), Chadwick_44 (A5), Cuco_40 (A5), Discoknowium_39 (A5), Dublin_39 (A5), ElTiger69_42 (A5), Florence1_39 (A5), Florence4_40 (A5), ForGetIt_40 (A5), George_40 (A5), Ghoulboy_42 (A5), HuhtaEnerson15_41 (A5), Jabiru_41 (A5), Jovo_40 (A5), Lev2_40 (A5), LittleCherry_41 (A5), MarysWell_39 (A5), Micasa_42 (A5), Milcery_41 (A5), Naca_42 (A5), PetterN_44 (A5), Phlorence_39 (A5), PickleBack_40 (A5), Prinashe11_40 (A5), Scorpia_44 (A5), Swirley_43 (A5), SydNat_42 (A5), Tarynearal_39 (A5), Twigg_41 (A5), UnionJack_41 (A5), Zolita_41 (A5),

Start 22:
• Found in 91 of 224 ( 40.6% ) of genes in pham
• Manual Annotations of this start: 88 of 204
• Called 98.9% of time when present

• Phage (with cluster) where this start called: ACFishhook_49 (A3), Aglet_51 (A3), AgronaGT15_49 (A3), Anubis_53 (A3), AugsMagnumOpus_53 (A3), Beauxregard13_50 (A3), Bigflo_50 (A3), BreSam8_50 (A3), BuzzBuzz_48 (A3), Bxz2_46 (A3), Calvinny_50 (A3), ClownCar_50 (A3), Colbster_50 (A3), Croquant_51 (A3), Cullens_50 (A3), DaHudson_50 (A3), Daishi_49 (A3), Dieselweasel_51 (A3), EpicPhail_51 (A3), Farber_50 (A3), Fernando_50 (A3), Gemma_49 (A3), GingkoMaracino_50 (A3), Grif_50 (A3), Groupthink_51 (A3), Grub_50 (A3), Grum1_50 (A3), GtownJaz_50 (A3), Gwennie_50 (A3), HashRod_51 (A3), HaveUMetTed_51 (A3), Heliosoles_49 (A3), Hercules11_50 (A3), JHC117_50 (A3), JenCasNa_51 (A3), JeppNRM_51 (A3), Jobu08_49 (A3), KADY_50 (A3), Kalb97_51 (A3), Kalnoky_51 (A3), LBerry_51 (A3), LarryKay_50 (A3), Lilith_51 (A3), Louie6_49 (A3), Lowa_50 (A3), LugYA_53 (A3), MadMarie_50 (A3), Mainiac_50 (A3), Malinsilva_52 (A3), Manu_50 (A3), MarQuardt_50 (A3), Marie_50 (A3), Marius_51 (A3), Methuselah_47 (A3), Microwolf_50 (A3), Misomonster_51 (A3), MoneyMay_50 (A3), Montavir_49 (A3), MuchMore_53 (A3), OlanP_49 (A3), Ollie_50 (A3), P28Green_51 (A3), PGHhamlin_52 (A3), Pawn_50 (A3), Pembroke_50 (A3), Penny1_51 (A3), PhishRPhriends_48 (A3), Phoebe_51 (A3), Phoxy_50 (A3), Phranny_51 (A3), PotatoSplit_52 (A3), PurpleHaze_50 (A3), Reba_50 (A3), Rummer_49 (A3), Sabia_50 (A3), Sabinator_49 (A3), Snickers_50 (A3), SoYo_50 (A3), SoilDragon_50 (A3), Soshari_52 (A3), Spike509_50 (A3), Stagni_50 (A3), StepMih_50 (A3), Taurus_51 (A3), Tiffany_50 (A3), TinyPebbles_49 (A3), Vix_50 (A3), Watson_50 (A3), Wooldri_52 (A3), Zetzy_49 (A3),

Start 23:
• Found in 42 of 224 ( 18.8% ) of genes in pham
• Manual Annotations of this start: 3 of 204
• Called 7.1% of time when present
• Phage (with cluster) where this start called: Conspiracy_40 (A5), Theia_38 (A5), Tiger_39 (A5),

Start 25:
• Found in 2 of 224 ( 0.9% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: FlyCatcher_51 (A7), Toro_49 (A7),

Start 32:
• Found in 43 of 224 ( 19.2% ) of genes in pham
• Manual Annotations of this start: 2 of 204
• Called 4.7% of time when present
• Phage (with cluster) where this start called: Coog_40 (A5), Midas2_40 (A5),

**Summary by clusters:**

There are 8 clusters represented in this pham: A15, singleton, CA, A18, A3, A5, A7, A8,

Info for manual annotations of cluster A18:
•Start number 14 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A3:
•Start number 15 was manually annotated 37 times for cluster A3.

•Start number 22 was manually annotated 88 times for cluster A3.

Info for manual annotations of cluster A5:
•Start number 21 was manually annotated 35 times for cluster A5.
•Start number 23 was manually annotated 3 times for cluster A5.
•Start number 32 was manually annotated 2 times for cluster A5.

Info for manual annotations of cluster A7:
•Start number 15 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A8:
•Start number 18 was manually annotated 1 time for cluster A8.

Info for manual annotations of cluster CA:
•Start number 10 was manually annotated 1 time for cluster CA.
•Start number 15 was manually annotated 35 times for cluster CA.

### *Gene Information:*

Gene: ACFishhook_49 Start: 32280, Stop: 32032, Start Num: 22
Candidate Starts for ACFishhook_49:
(Start: 22 @32280 has 88 MA's), (33, 32226), (34, 32223), (44, 32163), (46, 32139), (48, 32130), (53, 32082), (54, 32067),

Gene: AgentM_39 Start: 30764, Stop: 30501, Start Num: 21
Candidate Starts for AgentM_39:
(Start: 21 @30764 has 35 MA's), (Start: 23 @30755 has 3 MA's), (24, 30746), (28, 30725), (Start: 32 @30713 has 2 MA's), (45, 30629), (51, 30596), (53, 30563),

Gene: Aglet_51 Start: 32309, Stop: 32061, Start Num: 22
Candidate Starts for Aglet_51:
(Start: 22 @32309 has 88 MA's), (33, 32255), (44, 32192), (46, 32168), (48, 32159), (53, 32111), (54, 32096),

Gene: AgronaGT15_49 Start: 32160, Stop: 31912, Start Num: 22
Candidate Starts for AgronaGT15_49:
(Start: 22 @32160 has 88 MA's), (33, 32106), (44, 32043), (46, 32019), (48, 32010), (53, 31962), (54, 31947),

Gene: Airmid_41 Start: 30823, Stop: 30572, Start Num: 21
Candidate Starts for Airmid_41:
(9, 30901), (Start: 21 @30823 has 35 MA's), (Start: 23 @30814 has 3 MA's), (24, 30805), (Start: 32 @30772 has 2 MA's), (37, 30742), (42, 30727), (45, 30688), (51, 30655), (53, 30622),

Gene: Alatin_37 Start: 28461, Stop: 28189, Start Num: 15
Candidate Starts for Alatin_37:
(Start: 15 @28461 has 73 MA's), (52, 28245), (55, 28209),

Gene: Alpacados_36 Start: 28366, Stop: 28094, Start Num: 15
Candidate Starts for Alpacados_36:
(Start: 15 @28366 has 73 MA's), (30, 28300), (52, 28150), (55, 28114),

Gene: AngryOrchard_35 Start: 28325, Stop: 28053, Start Num: 15
Candidate Starts for AngryOrchard_35:
(Start: 15 @28325 has 73 MA's), (30, 28259), (52, 28109), (55, 28073),

Gene: Anubis_53 Start: 32195, Stop: 31947, Start Num: 22
Candidate Starts for Anubis_53:
(Start: 22 @32195 has 88 MA's), (33, 32141), (44, 32078), (46, 32054), (48, 32045), (53, 31997), (54, 31982),

Gene: AppleCloud_35 Start: 28336, Stop: 28064, Start Num: 15
Candidate Starts for AppleCloud_35:
(Start: 10 @28369 has 1 MA's), (Start: 15 @28336 has 73 MA's), (35, 28249), (52, 28120), (55, 28084),

Gene: Aragog_39 Start: 30794, Stop: 30531, Start Num: 21
Candidate Starts for Aragog_39:
(Start: 21 @30794 has 35 MA's), (Start: 23 @30785 has 3 MA's), (24, 30776), (28, 30755), (Start: 32 @30743 has 2 MA's), (45, 30659), (51, 30626), (53, 30593),

Gene: Archetta_40 Start: 31324, Stop: 31061, Start Num: 21
Candidate Starts for Archetta_40:
(Start: 21 @31324 has 35 MA's), (Start: 23 @31315 has 3 MA's), (24, 31306), (28, 31285), (Start: 32 @31273 has 2 MA's), (45, 31189), (51, 31156), (53, 31123),

Gene: AugsMagnumOpus_53 Start: 32300, Stop: 32052, Start Num: 22
Candidate Starts for AugsMagnumOpus_53:
(Start: 22 @32300 has 88 MA's), (33, 32246), (44, 32183), (46, 32159), (48, 32150), (53, 32102), (54, 32087),

Gene: B1_43 Start: 31013, Stop: 30738, Start Num: 15
Candidate Starts for B1_43:
(6, 31100), (11, 31043), (Start: 15 @31013 has 73 MA's), (38, 30908), (48, 30836), (53, 30788),

Gene: BabyJohn_44 Start: 31805, Stop: 31530, Start Num: 15
Candidate Starts for BabyJohn_44:
(3, 31922), (5, 31898), (6, 31892), (8, 31865), (Start: 15 @31805 has 73 MA's), (48, 31628), (53, 31580),

Gene: BabyRay_46 Start: 31749, Stop: 31474, Start Num: 15
Candidate Starts for BabyRay_46:
(1, 31890), (2, 31881), (Start: 15 @31749 has 73 MA's), (33, 31668), (48, 31572),

Gene: Beauxregard13_50 Start: 32312, Stop: 32064, Start Num: 22
Candidate Starts for Beauxregard13_50:
(Start: 22 @32312 has 88 MA's), (27, 32282), (33, 32258), (44, 32195), (46, 32171), (48, 32162), (53, 32114), (54, 32099),

Gene: Belenaria_37 Start: 28395, Stop: 28123, Start Num: 15
Candidate Starts for Belenaria_37:
(Start: 15 @28395 has 73 MA's), (30, 28329), (52, 28179), (55, 28143),

Gene: Benedict_43 Start: 30995, Stop: 30732, Start Num: 21
Candidate Starts for Benedict_43:

(Start: 21 @30995 has 35 MA's), (Start: 23 @30986 has 3 MA's), (Start: 32 @30944 has 2 MA's), (51, 30827), (52, 30803),

Gene: Bigflo_50 Start: 32308, Stop: 32060, Start Num: 22
Candidate Starts for Bigflo_50:
(Start: 22 @32308 has 88 MA's), (33, 32254), (44, 32191), (46, 32167), (48, 32158), (53, 32110), (54, 32095),

Gene: BlueBird_48 Start: 31838, Stop: 31563, Start Num: 15
Candidate Starts for BlueBird_48:
(Start: 15 @31838 has 73 MA's), (48, 31661), (53, 31613),

Gene: Bluefalcon_39 Start: 31282, Stop: 31019, Start Num: 21
Candidate Starts for Bluefalcon_39:
(Start: 21 @31282 has 35 MA's), (Start: 23 @31273 has 3 MA's), (24, 31264), (Start: 32 @31231 has 2 MA's), (45, 31147), (51, 31114), (53, 31081),

Gene: BobbyDazzler_37 Start: 28440, Stop: 28168, Start Num: 15
Candidate Starts for BobbyDazzler_37:
(Start: 15 @28440 has 73 MA's), (30, 28374), (52, 28224), (55, 28188),

Gene: Bonamassa_41 Start: 31313, Stop: 31050, Start Num: 21
Candidate Starts for Bonamassa_41:
(Start: 21 @31313 has 35 MA's), (Start: 23 @31304 has 3 MA's), (Start: 32 @31262 has 2 MA's), (37, 31232), (45, 31178), (51, 31145), (53, 31112),

Gene: Bonanza_37 Start: 28368, Stop: 28096, Start Num: 15
Candidate Starts for Bonanza_37:
(Start: 15 @28368 has 73 MA's), (30, 28302), (52, 28152), (55, 28116),

Gene: Bradshaw_37 Start: 28394, Stop: 28122, Start Num: 15
Candidate Starts for Bradshaw_37:
(Start: 15 @28394 has 73 MA's), (52, 28178), (55, 28142),

Gene: BreSam8_50 Start: 32302, Stop: 32054, Start Num: 22
Candidate Starts for BreSam8_50:
(Start: 22 @32302 has 88 MA's), (33, 32248), (44, 32185), (46, 32161), (48, 32152), (53, 32104), (54, 32089),

Gene: Bryce_37 Start: 28369, Stop: 28097, Start Num: 15
Candidate Starts for Bryce_37:
(Start: 15 @28369 has 73 MA's), (30, 28303), (52, 28153), (55, 28117),

Gene: Bugatti_48 Start: 31838, Stop: 31563, Start Num: 15
Candidate Starts for Bugatti_48:
(Start: 15 @31838 has 73 MA's), (48, 31661), (53, 31613),

Gene: BuzzBuzz_48 Start: 32339, Stop: 32091, Start Num: 22
Candidate Starts for BuzzBuzz_48:
(Start: 22 @32339 has 88 MA's), (33, 32285), (44, 32222), (46, 32198), (48, 32189), (53, 32141), (54, 32126),

Gene: Bxz2_46 Start: 32346, Stop: 32098, Start Num: 22

Candidate Starts for Bxz2_46:
(Start: 22 @32346 has 88 MA's), (33, 32292), (44, 32229), (46, 32205), (48, 32196), (53, 32148), (54, 32133),

Gene: Calvinny_50 Start: 32208, Stop: 31960, Start Num: 22
Candidate Starts for Calvinny_50:
(Start: 22 @32208 has 88 MA's), (33, 32154), (34, 32151), (44, 32091), (46, 32067), (48, 32058), (53, 32010), (54, 31995),

Gene: Cat_44 Start: 31362, Stop: 31087, Start Num: 15
Candidate Starts for Cat_44:
(1, 31503), (2, 31494), (Start: 15 @31362 has 73 MA's), (33, 31281), (48, 31185),

Gene: Caviar_46 Start: 32081, Stop: 31806, Start Num: 15
Candidate Starts for Caviar_46:
(4, 32171), (6, 32162), (Start: 15 @32081 has 73 MA's), (48, 31904),

Gene: Chadwick_44 Start: 30975, Stop: 30712, Start Num: 21
Candidate Starts for Chadwick_44:
(9, 31053), (Start: 21 @30975 has 35 MA's), (Start: 23 @30966 has 3 MA's), (26, 30945), (Start: 32 @30924 has 2 MA's), (51, 30807), (52, 30783),

Gene: Chiqui_44 Start: 31814, Stop: 31539, Start Num: 15
Candidate Starts for Chiqui_44:
(3, 31931), (5, 31907), (6, 31901), (8, 31874), (Start: 15 @31814 has 73 MA's), (48, 31637), (53, 31589),

Gene: Clammy_48 Start: 31838, Stop: 31563, Start Num: 15
Candidate Starts for Clammy_48:
(Start: 15 @31838 has 73 MA's), (48, 31661), (53, 31613),

Gene: ClownCar_50 Start: 32201, Stop: 31953, Start Num: 22
Candidate Starts for ClownCar_50:
(Start: 22 @32201 has 88 MA's), (33, 32147), (34, 32144), (44, 32084), (46, 32060), (48, 32051), (53, 32003), (54, 31988),

Gene: Colbster_50 Start: 32312, Stop: 32064, Start Num: 22
Candidate Starts for Colbster_50:
(Start: 22 @32312 has 88 MA's), (33, 32258), (44, 32195), (46, 32171), (48, 32162), (53, 32114), (54, 32099),

Gene: Conspiracy_40 Start: 30997, Stop: 30743, Start Num: 23
Candidate Starts for Conspiracy_40:
(Start: 21 @31006 has 35 MA's), (Start: 23 @30997 has 3 MA's), (24, 30988), (28, 30967), (Start: 32 @30955 has 2 MA's), (45, 30871), (51, 30838), (53, 30805),

Gene: Coog_40 Start: 31053, Stop: 30841, Start Num: 32
Candidate Starts for Coog_40:
(Start: 21 @31104 has 35 MA's), (Start: 23 @31095 has 3 MA's), (24, 31086), (28, 31065), (Start: 32 @31053 has 2 MA's), (45, 30969), (51, 30936), (53, 30903),

Gene: CosmicSans_37 Start: 28394, Stop: 28122, Start Num: 15
Candidate Starts for CosmicSans_37:

(Start: 15 @28394 has 73 MA's), (30, 28328), (52, 28178), (55, 28142),

Gene: Croquant_51 Start: 32307, Stop: 32059, Start Num: 22
Candidate Starts for Croquant_51:
(Start: 22 @32307 has 88 MA's), (33, 32253), (44, 32190), (46, 32166), (48, 32157), (53, 32109), (54, 32094),

Gene: Cuco_40 Start: 31061, Stop: 30810, Start Num: 21
Candidate Starts for Cuco_40:
(Start: 21 @31061 has 35 MA's), (Start: 23 @31052 has 3 MA's), (Start: 32 @31010 has 2 MA's), (45, 30926), (51, 30893), (53, 30860),

Gene: Cullens_50 Start: 32308, Stop: 32060, Start Num: 22
Candidate Starts for Cullens_50:
(Start: 22 @32308 has 88 MA's), (33, 32254), (44, 32191), (46, 32167), (48, 32158), (53, 32110), (54, 32095),

Gene: DaHudson_50 Start: 32301, Stop: 32053, Start Num: 22
Candidate Starts for DaHudson_50:
(Start: 22 @32301 has 88 MA's), (33, 32247), (44, 32184), (46, 32160), (48, 32151), (53, 32103), (54, 32088),

Gene: Daishi_49 Start: 31180, Stop: 30932, Start Num: 22
Candidate Starts for Daishi_49:
(Start: 22 @31180 has 88 MA's), (33, 31126), (44, 31063), (46, 31039), (48, 31030), (53, 30982), (54, 30967),

Gene: Dieselweasel_51 Start: 32311, Stop: 32063, Start Num: 22
Candidate Starts for Dieselweasel_51:
(Start: 22 @32311 has 88 MA's), (33, 32257), (44, 32194), (46, 32170), (48, 32161), (53, 32113), (54, 32098),

Gene: Dinger_37 Start: 28378, Stop: 28106, Start Num: 15
Candidate Starts for Dinger_37:
(Start: 10 @28411 has 1 MA's), (Start: 15 @28378 has 73 MA's), (35, 28291), (52, 28162), (55, 28126),

Gene: Discoknowium_39 Start: 30803, Stop: 30540, Start Num: 21
Candidate Starts for Discoknowium_39:
(Start: 21 @30803 has 35 MA's), (Start: 23 @30794 has 3 MA's), (24, 30785), (28, 30764), (Start: 32 @30752 has 2 MA's), (45, 30668), (51, 30635), (53, 30602),

Gene: DropBear_46 Start: 31726, Stop: 31451, Start Num: 15
Candidate Starts for DropBear_46:
(Start: 15 @31726 has 73 MA's), (48, 31549), (53, 31501),

Gene: Dublin_39 Start: 30825, Stop: 30562, Start Num: 21
Candidate Starts for Dublin_39:
(Start: 21 @30825 has 35 MA's), (Start: 23 @30816 has 3 MA's), (Start: 32 @30774 has 2 MA's), (37, 30744), (45, 30690), (51, 30657), (53, 30624),

Gene: ElTiger69_42 Start: 30992, Stop: 30729, Start Num: 21
Candidate Starts for ElTiger69_42:

(9, 31070), (Start: 21 @30992 has 35 MA's), (Start: 23 @30983 has 3 MA's), (26, 30962), (Start: 32 @30941 has 2 MA's), (51, 30824), (52, 30800),

Gene: EpicPhail_51 Start: 32312, Stop: 32064, Start Num: 22
Candidate Starts for EpicPhail_51:
(Start: 22 @32312 has 88 MA's), (27, 32282), (33, 32258), (44, 32195), (46, 32171), (48, 32162), (53, 32114), (54, 32099),

Gene: Erik_37 Start: 28392, Stop: 28120, Start Num: 15
Candidate Starts for Erik_37:
(Start: 15 @28392 has 73 MA's), (30, 28326), (52, 28176), (55, 28140),

Gene: Espica_37 Start: 28395, Stop: 28123, Start Num: 15
Candidate Starts for Espica_37:
(Start: 15 @28395 has 73 MA's), (30, 28329), (52, 28179), (55, 28143),

Gene: EtoileNova_47 Start: 32085, Stop: 31810, Start Num: 15
Candidate Starts for EtoileNova_47:
(4, 32175), (6, 32166), (Start: 15 @32085 has 73 MA's), (48, 31908),

Gene: Farber_50 Start: 32301, Stop: 32053, Start Num: 22
Candidate Starts for Farber_50:
(Start: 22 @32301 has 88 MA's), (33, 32247), (44, 32184), (46, 32160), (48, 32151), (53, 32103), (54, 32088),

Gene: Fernando_50 Start: 32308, Stop: 32060, Start Num: 22
Candidate Starts for Fernando_50:
(Start: 22 @32308 has 88 MA's), (33, 32254), (44, 32191), (46, 32167), (48, 32158), (53, 32110), (54, 32095),

Gene: Florence1_39 Start: 30678, Stop: 30415, Start Num: 21
Candidate Starts for Florence1_39:
(Start: 21 @30678 has 35 MA's), (Start: 23 @30669 has 3 MA's), (Start: 32 @30627 has 2 MA's), (37, 30597), (45, 30543), (51, 30510), (53, 30477),

Gene: Florence4_40 Start: 30678, Stop: 30415, Start Num: 21
Candidate Starts for Florence4_40:
(Start: 21 @30678 has 35 MA's), (Start: 23 @30669 has 3 MA's), (Start: 32 @30627 has 2 MA's), (37, 30597), (45, 30543), (51, 30510), (53, 30477),

Gene: FlyCatcher_51 Start: 34178, Stop: 33957, Start Num: 25
Candidate Starts for FlyCatcher_51:
(16, 34220), (25, 34178), (27, 34169), (39, 34121), (43, 34109), (49, 34052), (55, 33980),

Gene: ForGetIt_40 Start: 31031, Stop: 30768, Start Num: 21
Candidate Starts for ForGetIt_40:
(Start: 21 @31031 has 35 MA's), (Start: 23 @31022 has 3 MA's), (24, 31013), (28, 30992), (Start: 32 @30980 has 2 MA's), (45, 30896), (51, 30863), (53, 30830),

Gene: Fred313_46 Start: 31411, Stop: 31136, Start Num: 15
Candidate Starts for Fred313_46:
(12, 31432), (Start: 15 @31411 has 73 MA's), (48, 31234), (53, 31186),

Gene: Gemma_49 Start: 32204, Stop: 31956, Start Num: 22
Candidate Starts for Gemma_49:
(Start: 22 @32204 has 88 MA's), (33, 32150), (34, 32147), (44, 32087), (46, 32063), (48, 32054), (53, 32006), (54, 31991),

Gene: George_40 Start: 31255, Stop: 30992, Start Num: 21
Candidate Starts for George_40:
(Start: 21 @31255 has 35 MA's), (Start: 23 @31246 has 3 MA's), (Start: 32 @31204 has 2 MA's), (37, 31174), (45, 31120), (51, 31087), (53, 31054),

Gene: Ghoulboy_42 Start: 31768, Stop: 31505, Start Num: 21
Candidate Starts for Ghoulboy_42:
(Start: 21 @31768 has 35 MA's), (Start: 23 @31759 has 3 MA's), (Start: 32 @31717 has 2 MA's), (37, 31687), (45, 31633), (51, 31600), (53, 31567),

Gene: GingkoMaracino_50 Start: 32194, Stop: 31946, Start Num: 22
Candidate Starts for GingkoMaracino_50:
(Start: 22 @32194 has 88 MA's), (33, 32140), (44, 32077), (46, 32053), (48, 32044), (53, 31996), (54, 31981),

Gene: Giroux_48 Start: 31837, Stop: 31562, Start Num: 15
Candidate Starts for Giroux_48:
(Start: 15 @31837 has 73 MA's), (48, 31660), (53, 31612),

Gene: Gollum_37 Start: 28394, Stop: 28122, Start Num: 15
Candidate Starts for Gollum_37:
(Start: 15 @28394 has 73 MA's), (30, 28328), (52, 28178), (55, 28142),

Gene: Goose1D_40 Start: 27859, Stop: 27584, Start Num: 15
Candidate Starts for Goose1D_40:
(Start: 15 @27859 has 73 MA's), (48, 27682), (53, 27634),

Gene: Goose1X_46 Start: 31001, Stop: 30726, Start Num: 15
Candidate Starts for Goose1X_46:
(Start: 15 @31001 has 73 MA's), (48, 30824), (53, 30776),

Gene: Grif_50 Start: 32383, Stop: 32135, Start Num: 22
Candidate Starts for Grif_50:
(Start: 22 @32383 has 88 MA's), (33, 32329), (44, 32266), (46, 32242), (48, 32233), (53, 32185), (54, 32170),

Gene: Groupthink_51 Start: 32208, Stop: 31960, Start Num: 22
Candidate Starts for Groupthink_51:
(Start: 22 @32208 has 88 MA's), (33, 32154), (34, 32151), (44, 32091), (46, 32067), (48, 32058), (53, 32010), (54, 31995),

Gene: Grub_50 Start: 32300, Stop: 32052, Start Num: 22
Candidate Starts for Grub_50:
(Start: 22 @32300 has 88 MA's), (33, 32246), (44, 32183), (46, 32159), (48, 32150), (53, 32102), (54, 32087),

Gene: Grum1_50 Start: 32308, Stop: 32060, Start Num: 22
Candidate Starts for Grum1_50:

(19, 32317), (Start: 22 @32308 has 88 MA's), (33, 32254), (44, 32191), (46, 32167), (48, 32158), (53, 32110), (54, 32095),

Gene: GtownJaz_50 Start: 32310, Stop: 32062, Start Num: 22
Candidate Starts for GtownJaz_50:
(Start: 22 @32310 has 88 MA's), (33, 32256), (44, 32193), (46, 32169), (48, 32160), (53, 32112), (54, 32097),

Gene: Gwennie_50 Start: 32312, Stop: 32064, Start Num: 22
Candidate Starts for Gwennie_50:
(Start: 22 @32312 has 88 MA's), (27, 32282), (33, 32258), (44, 32195), (46, 32171), (48, 32162), (53, 32114), (54, 32099),

Gene: HINdeR_43 Start: 33388, Stop: 33113, Start Num: 15
Candidate Starts for HINdeR_43:
(Start: 15 @33388 has 73 MA's), (17, 33382), (27, 33331), (29, 33325), (33, 33307), (55, 33136),

Gene: Harlequin_37 Start: 28399, Stop: 28127, Start Num: 15
Candidate Starts for Harlequin_37:
(Start: 15 @28399 has 73 MA's), (30, 28333), (52, 28183), (55, 28147),

Gene: HashRod_51 Start: 32339, Stop: 32091, Start Num: 22
Candidate Starts for HashRod_51:
(Start: 22 @32339 has 88 MA's), (33, 32285), (44, 32222), (46, 32198), (48, 32189), (53, 32141), (54, 32126),

Gene: HaveUMetTed_51 Start: 32190, Stop: 31942, Start Num: 22
Candidate Starts for HaveUMetTed_51:
(Start: 22 @32190 has 88 MA's), (33, 32136), (34, 32133), (44, 32073), (46, 32049), (48, 32040), (53, 31992), (54, 31977),

Gene: Heathen_46 Start: 31467, Stop: 31192, Start Num: 15
Candidate Starts for Heathen_46:
(Start: 15 @31467 has 73 MA's), (48, 31290), (53, 31242),

Gene: HelDan_46 Start: 31719, Stop: 31444, Start Num: 15
Candidate Starts for HelDan_46:
(Start: 15 @31719 has 73 MA's), (48, 31542), (53, 31494),

Gene: Heliosoles_49 Start: 32211, Stop: 31963, Start Num: 22
Candidate Starts for Heliosoles_49:
(Start: 22 @32211 has 88 MA's), (33, 32157), (34, 32154), (44, 32094), (46, 32070), (48, 32061), (53, 32013), (54, 31998),

Gene: Hercules11_50 Start: 32317, Stop: 32069, Start Num: 22
Candidate Starts for Hercules11_50:
(Start: 22 @32317 has 88 MA's), (33, 32263), (44, 32200), (46, 32176), (48, 32167), (53, 32119), (54, 32104),

Gene: Hiro_37 Start: 28654, Stop: 28382, Start Num: 15
Candidate Starts for Hiro_37:
(Start: 15 @28654 has 73 MA's), (30, 28588), (47, 28483), (52, 28438), (55, 28402),

Gene: Hookmount_46 Start: 32082, Stop: 31807, Start Num: 15
Candidate Starts for Hookmount_46:
(4, 32172), (6, 32163), (Start: 15 @32082 has 73 MA's), (48, 31905),

Gene: HuhtaEnerson15_41 Start: 31246, Stop: 30983, Start Num: 21
Candidate Starts for HuhtaEnerson15_41:
(Start: 21 @31246 has 35 MA's), (Start: 23 @31237 has 3 MA's), (Start: 32 @31195 has 2 MA's), (37, 31165), (45, 31111), (51, 31078), (53, 31045),

Gene: Idleandcovert_47 Start: 31838, Stop: 31563, Start Num: 15
Candidate Starts for Idleandcovert_47:
(Start: 15 @31838 has 73 MA's), (48, 31661), (53, 31613),

Gene: Isca_45 Start: 31262, Stop: 30987, Start Num: 15
Candidate Starts for Isca_45:
(6, 31349), (11, 31292), (Start: 15 @31262 has 73 MA's), (38, 31157), (48, 31085), (53, 31037),

Gene: JF2_46 Start: 31013, Stop: 30738, Start Num: 15
Candidate Starts for JF2_46:
(6, 31100), (11, 31043), (Start: 15 @31013 has 73 MA's), (38, 30908), (48, 30836), (53, 30788),

Gene: JF4_46 Start: 31013, Stop: 30738, Start Num: 15
Candidate Starts for JF4_46:
(6, 31100), (11, 31043), (Start: 15 @31013 has 73 MA's), (38, 30908), (48, 30836), (53, 30788),

Gene: JHC117_50 Start: 32307, Stop: 32059, Start Num: 22
Candidate Starts for JHC117_50:
(Start: 22 @32307 has 88 MA's), (33, 32253), (44, 32190), (46, 32166), (48, 32157), (53, 32109), (54, 32094),

Gene: Jabiru_41 Start: 30865, Stop: 30614, Start Num: 21
Candidate Starts for Jabiru_41:
(7, 30955), (9, 30943), (Start: 21 @30865 has 35 MA's), (Start: 23 @30856 has 3 MA's), (Start: 32 @30814 has 2 MA's), (37, 30784), (45, 30730), (51, 30697), (53, 30664),

Gene: JenCasNa_51 Start: 32308, Stop: 32060, Start Num: 22
Candidate Starts for JenCasNa_51:
(Start: 22 @32308 has 88 MA's), (33, 32254), (44, 32191), (46, 32167), (48, 32158), (53, 32110), (54, 32095),

Gene: JeppNRM_51 Start: 32209, Stop: 31961, Start Num: 22
Candidate Starts for JeppNRM_51:
(Start: 22 @32209 has 88 MA's), (33, 32155), (34, 32152), (44, 32092), (46, 32068), (48, 32059), (53, 32011), (54, 31996),

Gene: Jester_37 Start: 28330, Stop: 28058, Start Num: 15
Candidate Starts for Jester_37:
(Start: 15 @28330 has 73 MA's), (30, 28264), (52, 28114), (55, 28078),

Gene: Jobu08_49 Start: 32140, Stop: 31892, Start Num: 22
Candidate Starts for Jobu08_49:
(Start: 22 @32140 has 88 MA's), (33, 32086), (34, 32083), (44, 32023), (46, 31999), (48, 31990), (53, 31942), (54, 31927),

Gene: Jovo_40 Start: 31287, Stop: 31024, Start Num: 21
Candidate Starts for Jovo_40:
(Start: 21 @31287 has 35 MA's), (Start: 23 @31278 has 3 MA's), (24, 31269), (28, 31248), (Start: 32 @31236 has 2 MA's), (45, 31152), (51, 31119), (53, 31086),

Gene: KADY_50 Start: 32339, Stop: 32091, Start Num: 22
Candidate Starts for KADY_50:
(Start: 22 @32339 has 88 MA's), (33, 32285), (44, 32222), (46, 32198), (48, 32189), (53, 32141), (54, 32126),

Gene: Kachowdy_46 Start: 31719, Stop: 31444, Start Num: 15
Candidate Starts for Kachowdy_46:
(Start: 15 @31719 has 73 MA's), (48, 31542), (53, 31494),

Gene: Kalb97_51 Start: 32207, Stop: 31959, Start Num: 22
Candidate Starts for Kalb97_51:
(Start: 22 @32207 has 88 MA's), (33, 32153), (34, 32150), (44, 32090), (46, 32066), (48, 32057), (53, 32009), (54, 31994),

Gene: Kalnoky_51 Start: 32205, Stop: 31957, Start Num: 22
Candidate Starts for Kalnoky_51:
(Start: 22 @32205 has 88 MA's), (33, 32151), (34, 32148), (44, 32088), (46, 32064), (48, 32055), (53, 32007), (54, 31992),

Gene: Krishelle_37 Start: 28678, Stop: 28406, Start Num: 15
Candidate Starts for Krishelle_37:
(Start: 10 @28711 has 1 MA's), (Start: 15 @28678 has 73 MA's), (35, 28591), (52, 28462), (55, 28426),

Gene: LBerry_51 Start: 32312, Stop: 32064, Start Num: 22
Candidate Starts for LBerry_51:
(Start: 22 @32312 has 88 MA's), (33, 32258), (44, 32195), (46, 32171), (48, 32162), (53, 32114), (54, 32099),

Gene: Lambert1_46 Start: 32081, Stop: 31806, Start Num: 15
Candidate Starts for Lambert1_46:
(4, 32171), (6, 32162), (Start: 15 @32081 has 73 MA's), (48, 31904),

Gene: LarryKay_50 Start: 32341, Stop: 32093, Start Num: 22
Candidate Starts for LarryKay_50:
(Start: 22 @32341 has 88 MA's), (33, 32287), (44, 32224), (46, 32200), (48, 32191), (53, 32143), (54, 32128),

Gene: Lev2_40 Start: 30919, Stop: 30656, Start Num: 21
Candidate Starts for Lev2_40:
(Start: 21 @30919 has 35 MA's), (Start: 23 @30910 has 3 MA's), (24, 30901), (28, 30880), (Start: 32 @30868 has 2 MA's), (45, 30784), (51, 30751), (53, 30718),

Gene: Lilith_51 Start: 32301, Stop: 32053, Start Num: 22
Candidate Starts for Lilith_51:
(Start: 22 @32301 has 88 MA's), (33, 32247), (44, 32184), (46, 32160), (48, 32151), (53, 32103), (54, 32088),

Gene: Lillie_37 Start: 28394, Stop: 28122, Start Num: 15
Candidate Starts for Lillie_37:
(Start: 15 @28394 has 73 MA's), (30, 28328), (52, 28178), (55, 28142),

Gene: LittleCherry_41 Start: 31256, Stop: 30993, Start Num: 21
Candidate Starts for LittleCherry_41:
(Start: 21 @31256 has 35 MA's), (Start: 23 @31247 has 3 MA's), (Start: 32 @31205 has 2 MA's), (37, 31175), (45, 31121), (51, 31088), (53, 31055),

Gene: LogiBear_47 Start: 30262, Stop: 29981, Start Num: 13
Candidate Starts for LogiBear_47:
(13, 30262), (Start: 32 @30184 has 2 MA's), (48, 30079), (51, 30064), (52, 30040),

Gene: Louie6_49 Start: 32340, Stop: 32092, Start Num: 22
Candidate Starts for Louie6_49:
(Start: 22 @32340 has 88 MA's), (33, 32286), (44, 32223), (46, 32199), (48, 32190), (53, 32142), (54, 32127),

Gene: Lowa_50 Start: 32300, Stop: 32052, Start Num: 22
Candidate Starts for Lowa_50:
(Start: 22 @32300 has 88 MA's), (33, 32246), (44, 32183), (46, 32159), (48, 32150), (53, 32102), (54, 32087),

Gene: LugYA_53 Start: 32309, Stop: 32061, Start Num: 22
Candidate Starts for LugYA_53:
(Start: 22 @32309 has 88 MA's), (33, 32255), (44, 32192), (46, 32168), (48, 32159), (53, 32111), (54, 32096),

Gene: MA5_46 Start: 31164, Stop: 30889, Start Num: 15
Candidate Starts for MA5_46:
(3, 31281), (5, 31257), (6, 31251), (8, 31224), (Start: 15 @31164 has 73 MA's), (36, 31074), (48, 30987), (53, 30939),

Gene: MK4_46 Start: 31247, Stop: 30972, Start Num: 15
Candidate Starts for MK4_46:
(6, 31334), (11, 31277), (Start: 15 @31247 has 73 MA's), (38, 31142), (48, 31070), (53, 31022),

Gene: MadMarie_50 Start: 32310, Stop: 32062, Start Num: 22
Candidate Starts for MadMarie_50:
(Start: 22 @32310 has 88 MA's), (33, 32256), (44, 32193), (46, 32169), (48, 32160), (53, 32112), (54, 32097),

Gene: Mainiac_50 Start: 32302, Stop: 32054, Start Num: 22
Candidate Starts for Mainiac_50:
(Start: 22 @32302 has 88 MA's), (33, 32248), (44, 32185), (46, 32161), (48, 32152), (53, 32104), (54, 32089),

Gene: Malinsilva_52 Start: 32300, Stop: 32052, Start Num: 22
Candidate Starts for Malinsilva_52:
(Start: 22 @32300 has 88 MA's), (33, 32246), (44, 32183), (46, 32159), (48, 32150), (53, 32102), (54, 32087),

Gene: Manu_50 Start: 32208, Stop: 31960, Start Num: 22

Candidate Starts for Manu_50:
(Start: 22 @32208 has 88 MA's), (33, 32154), (34, 32151), (44, 32091), (46, 32067), (48, 32058), (53, 32010), (54, 31995),

Gene: MarQuardt_50 Start: 32310, Stop: 32062, Start Num: 22
Candidate Starts for MarQuardt_50:
(Start: 22 @32310 has 88 MA's), (33, 32256), (44, 32193), (46, 32169), (48, 32160), (53, 32112), (54, 32097),

Gene: Marchesa_46 Start: 31717, Stop: 31442, Start Num: 15
Candidate Starts for Marchesa_46:
(Start: 15 @31717 has 73 MA's), (48, 31540), (53, 31492),

Gene: Margo_46 Start: 32107, Stop: 31832, Start Num: 15
Candidate Starts for Margo_46:
(4, 32197), (6, 32188), (Start: 15 @32107 has 73 MA's), (48, 31930),

Gene: Marie_50 Start: 32308, Stop: 32060, Start Num: 22
Candidate Starts for Marie_50:
(Start: 22 @32308 has 88 MA's), (33, 32254), (44, 32191), (46, 32167), (48, 32158), (53, 32110), (54, 32095),

Gene: Marius_51 Start: 32205, Stop: 31957, Start Num: 22
Candidate Starts for Marius_51:
(Start: 22 @32205 has 88 MA's), (33, 32151), (34, 32148), (44, 32088), (46, 32064), (48, 32055), (53, 32007), (54, 31992),

Gene: MarysWell_39 Start: 31119, Stop: 30856, Start Num: 21
Candidate Starts for MarysWell_39:
(Start: 21 @31119 has 35 MA's), (Start: 23 @31110 has 3 MA's), (24, 31101), (Start: 32 @31068 has 2 MA's), (45, 30984), (51, 30951), (53, 30918),

Gene: Methuselah_47 Start: 32335, Stop: 32087, Start Num: 22
Candidate Starts for Methuselah_47:
(Start: 22 @32335 has 88 MA's), (33, 32281), (44, 32218), (46, 32194), (48, 32185), (53, 32137), (54, 32122),

Gene: Micasa_42 Start: 31386, Stop: 31123, Start Num: 21
Candidate Starts for Micasa_42:
(Start: 21 @31386 has 35 MA's), (Start: 23 @31377 has 3 MA's), (Start: 32 @31335 has 2 MA's), (37, 31305), (45, 31251), (51, 31218), (53, 31185),

Gene: Microwolf_50 Start: 32309, Stop: 32061, Start Num: 22
Candidate Starts for Microwolf_50:
(Start: 22 @32309 has 88 MA's), (33, 32255), (44, 32192), (46, 32168), (48, 32159), (53, 32111), (54, 32096),

Gene: Midas2_40 Start: 31053, Stop: 30841, Start Num: 32
Candidate Starts for Midas2_40:
(Start: 21 @31104 has 35 MA's), (Start: 23 @31095 has 3 MA's), (24, 31086), (28, 31065), (Start: 32 @31053 has 2 MA's), (45, 30969), (51, 30936), (53, 30903),

Gene: Milcery_41 Start: 31223, Stop: 30960, Start Num: 21

Candidate Starts for Milcery_41:
(Start: 21 @31223 has 35 MA's), (Start: 23 @31214 has 3 MA's), (Start: 32 @31172 has 2 MA's), (37, 31142), (45, 31088), (51, 31055), (53, 31022),

Gene: Misomonster_51 Start: 32338, Stop: 32090, Start Num: 22
Candidate Starts for Misomonster_51:
(Start: 22 @32338 has 88 MA's), (33, 32284), (44, 32221), (46, 32197), (48, 32188), (53, 32140), (54, 32125),

Gene: MoneyMay_50 Start: 32308, Stop: 32060, Start Num: 22
Candidate Starts for MoneyMay_50:
(Start: 22 @32308 has 88 MA's), (33, 32254), (44, 32191), (46, 32167), (48, 32158), (53, 32110), (54, 32095),

Gene: Montavir_49 Start: 32309, Stop: 32061, Start Num: 22
Candidate Starts for Montavir_49:
(Start: 22 @32309 has 88 MA's), (33, 32255), (44, 32192), (46, 32168), (48, 32159), (53, 32111), (54, 32096),

Gene: MuchMore_53 Start: 32300, Stop: 32052, Start Num: 22
Candidate Starts for MuchMore_53:
(Start: 22 @32300 has 88 MA's), (33, 32246), (44, 32183), (46, 32159), (48, 32150), (53, 32102), (54, 32087),

Gene: MyraDee_42 Start: 29297, Stop: 29043, Start Num: 14
Candidate Starts for MyraDee_42:
(Start: 14 @29297 has 1 MA's), (48, 29138), (53, 29090),

Gene: Naca_42 Start: 31534, Stop: 31271, Start Num: 21
Candidate Starts for Naca_42:
(Start: 21 @31534 has 35 MA's), (Start: 23 @31525 has 3 MA's), (26, 31504), (Start: 32 @31483 has 2 MA's), (51, 31366), (52, 31342),

Gene: Naiad_37 Start: 28407, Stop: 28135, Start Num: 15
Candidate Starts for Naiad_37:
(Start: 15 @28407 has 73 MA's), (52, 28191), (55, 28155),

Gene: Nancinator_37 Start: 28395, Stop: 28123, Start Num: 15
Candidate Starts for Nancinator_37:
(Start: 15 @28395 has 73 MA's), (30, 28329), (52, 28179), (55, 28143),

Gene: Natosaleda_37 Start: 28394, Stop: 28122, Start Num: 15
Candidate Starts for Natosaleda_37:
(Start: 15 @28394 has 73 MA's), (30, 28328), (52, 28178), (55, 28142),

Gene: Noella_46 Start: 32082, Stop: 31807, Start Num: 15
Candidate Starts for Noella_46:
(4, 32172), (6, 32163), (Start: 15 @32082 has 73 MA's), (48, 31905),

Gene: Norbert_45 Start: 32081, Stop: 31806, Start Num: 15
Candidate Starts for Norbert_45:
(4, 32171), (6, 32162), (Start: 15 @32081 has 73 MA's), (48, 31904),

Gene: OlanP_49 Start: 32378, Stop: 32130, Start Num: 22
Candidate Starts for OlanP_49:
(Start: 22 @32378 has 88 MA's), (31, 32336), (33, 32324), (34, 32321), (44, 32261), (46, 32237), (48, 32228), (53, 32180), (54, 32165),

Gene: Ollie_50 Start: 32179, Stop: 31931, Start Num: 22
Candidate Starts for Ollie_50:
(Start: 22 @32179 has 88 MA's), (33, 32125), (44, 32062), (46, 32038), (48, 32029), (53, 31981), (54, 31966),

Gene: P28Green_51 Start: 32311, Stop: 32063, Start Num: 22
Candidate Starts for P28Green_51:
(Start: 22 @32311 has 88 MA's), (33, 32257), (44, 32194), (46, 32170), (48, 32161), (53, 32113), (54, 32098),

Gene: PGHhamlin_52 Start: 32300, Stop: 32052, Start Num: 22
Candidate Starts for PGHhamlin_52:
(Start: 22 @32300 has 88 MA's), (33, 32246), (44, 32183), (46, 32159), (48, 32150), (53, 32102), (54, 32087),

Gene: Panamaxus_44 Start: 32081, Stop: 31806, Start Num: 15
Candidate Starts for Panamaxus_44:
(4, 32171), (6, 32162), (Start: 15 @32081 has 73 MA's), (48, 31904),

Gene: Partridge_37 Start: 28510, Stop: 28205, Start Num: 10
Candidate Starts for Partridge_37:
(Start: 10 @28510 has 1 MA's), (Start: 15 @28477 has 73 MA's), (35, 28390), (52, 28261), (55, 28225),

Gene: Pawn_50 Start: 32212, Stop: 31964, Start Num: 22
Candidate Starts for Pawn_50:
(Start: 22 @32212 has 88 MA's), (33, 32158), (34, 32155), (44, 32095), (46, 32071), (48, 32062), (53, 32014), (54, 31999),

Gene: Pembroke_50 Start: 32309, Stop: 32061, Start Num: 22
Candidate Starts for Pembroke_50:
(Start: 22 @32309 has 88 MA's), (33, 32255), (44, 32192), (46, 32168), (48, 32159), (53, 32111), (54, 32096),

Gene: Penny1_51 Start: 32312, Stop: 32064, Start Num: 22
Candidate Starts for Penny1_51:
(Start: 22 @32312 has 88 MA's), (27, 32282), (33, 32258), (44, 32195), (46, 32171), (48, 32162), (53, 32114), (54, 32099),

Gene: PetterN_44 Start: 30975, Stop: 30712, Start Num: 21
Candidate Starts for PetterN_44:
(9, 31053), (Start: 21 @30975 has 35 MA's), (Start: 23 @30966 has 3 MA's), (26, 30945), (Start: 32 @30924 has 2 MA's), (51, 30807), (52, 30783),

Gene: PhailMary_36 Start: 28716, Stop: 28444, Start Num: 15
Candidate Starts for PhailMary_36:
(Start: 15 @28716 has 73 MA's), (30, 28650), (52, 28500), (55, 28464),

Gene: Phantastic_47 Start: 31457, Stop: 31182, Start Num: 15

Candidate Starts for Phantastic_47:
(6, 31538), (11, 31481), (Start: 15 @31457 has 73 MA's), (Start: 22 @31430 has 88 MA's), (48, 31280), (53, 31232),

Gene: Phillis_46 Start: 31492, Stop: 31232, Start Num: 18
Candidate Starts for Phillis_46:
(Start: 18 @31492 has 1 MA's), (Start: 21 @31483 has 35 MA's), (50, 31330), (53, 31291),

Gene: PhishRPhriends_48 Start: 31386, Stop: 31138, Start Num: 22
Candidate Starts for PhishRPhriends_48:
(Start: 22 @31386 has 88 MA's), (33, 31332), (34, 31329), (44, 31269), (46, 31245), (48, 31236), (53, 31188), (54, 31173),

Gene: Phlorence_39 Start: 30794, Stop: 30531, Start Num: 21
Candidate Starts for Phlorence_39:
(Start: 21 @30794 has 35 MA's), (Start: 23 @30785 has 3 MA's), (24, 30776), (28, 30755), (Start: 32 @30743 has 2 MA's), (45, 30659), (51, 30626), (53, 30593),

Gene: Phoebe_51 Start: 32301, Stop: 32053, Start Num: 22
Candidate Starts for Phoebe_51:
(Start: 22 @32301 has 88 MA's), (33, 32247), (44, 32184), (46, 32160), (48, 32151), (53, 32103), (54, 32088),

Gene: Phoxy_50 Start: 32336, Stop: 32088, Start Num: 22
Candidate Starts for Phoxy_50:
(Start: 22 @32336 has 88 MA's), (33, 32282), (44, 32219), (46, 32195), (48, 32186), (53, 32138), (54, 32123),

Gene: Phrankenstein_37 Start: 28340, Stop: 28068, Start Num: 15
Candidate Starts for Phrankenstein_37:
(Start: 15 @28340 has 73 MA's), (30, 28274), (52, 28124), (55, 28088),

Gene: Phranny_51 Start: 32194, Stop: 31946, Start Num: 22
Candidate Starts for Phranny_51:
(Start: 22 @32194 has 88 MA's), (33, 32140), (34, 32137), (44, 32077), (46, 32053), (48, 32044), (53, 31996), (54, 31981),

Gene: PickleBack_40 Start: 30920, Stop: 30657, Start Num: 21
Candidate Starts for PickleBack_40:
(Start: 21 @30920 has 35 MA's), (Start: 23 @30911 has 3 MA's), (24, 30902), (28, 30881), (Start: 32 @30869 has 2 MA's), (45, 30785), (51, 30752), (53, 30719),

Gene: Pistachio_48 Start: 31385, Stop: 31110, Start Num: 15
Candidate Starts for Pistachio_48:
(Start: 15 @31385 has 73 MA's), (48, 31208), (53, 31160),

Gene: Pocahontas_46 Start: 32078, Stop: 31803, Start Num: 15
Candidate Starts for Pocahontas_46:
(4, 32168), (6, 32159), (Start: 15 @32078 has 73 MA's), (48, 31901),

Gene: Popcicle_46 Start: 32078, Stop: 31803, Start Num: 15
Candidate Starts for Popcicle_46:
(4, 32168), (6, 32159), (Start: 15 @32078 has 73 MA's), (48, 31901),

Gene: PotatoSplit_52 Start: 32312, Stop: 32064, Start Num: 22
Candidate Starts for PotatoSplit_52:
(Start: 22 @32312 has 88 MA's), (33, 32258), (44, 32195), (46, 32171), (48, 32162), (53, 32114), (54, 32099),

Gene: Prinashe11_40 Start: 31086, Stop: 30823, Start Num: 21
Candidate Starts for Prinashe11_40:
(Start: 21 @31086 has 35 MA's), (Start: 23 @31077 has 3 MA's), (Start: 32 @31035 has 2 MA's), (37, 31005), (45, 30951), (51, 30918), (53, 30885),

Gene: Puppy_48 Start: 31458, Stop: 31183, Start Num: 15
Candidate Starts for Puppy_48:
(Start: 15 @31458 has 73 MA's), (48, 31281), (53, 31233),

Gene: PurpleHaze_50 Start: 32207, Stop: 31959, Start Num: 22
Candidate Starts for PurpleHaze_50:
(Start: 22 @32207 has 88 MA's), (33, 32153), (34, 32150), (44, 32090), (46, 32066), (48, 32057), (53, 32009), (54, 31994),

Gene: QuinnKiro_45 Start: 32081, Stop: 31806, Start Num: 15
Candidate Starts for QuinnKiro_45:
(4, 32171), (6, 32162), (Start: 15 @32081 has 73 MA's), (48, 31904),

Gene: RER2_30 Start: 25266, Stop: 24994, Start Num: 15
Candidate Starts for RER2_30:
(Start: 15 @25266 has 73 MA's), (30, 25200), (52, 25050), (55, 25014),

Gene: Rasputin_37 Start: 28364, Stop: 28092, Start Num: 15
Candidate Starts for Rasputin_37:
(Start: 15 @28364 has 73 MA's), (30, 28298), (52, 28148), (55, 28112),

Gene: Reba_50 Start: 31867, Stop: 31619, Start Num: 22
Candidate Starts for Reba_50:
(Start: 22 @31867 has 88 MA's), (33, 31813), (34, 31810), (44, 31750), (46, 31726), (48, 31717), (53, 31669), (54, 31654),

Gene: ResDef_46 Start: 32081, Stop: 31806, Start Num: 15
Candidate Starts for ResDef_46:
(4, 32171), (6, 32162), (Start: 15 @32081 has 73 MA's), (48, 31904),

Gene: RexFury_37 Start: 28425, Stop: 28153, Start Num: 15
Candidate Starts for RexFury_37:
(Start: 15 @28425 has 73 MA's), (30, 28359), (52, 28209), (55, 28173),

Gene: Rhodalysa_37 Start: 28394, Stop: 28122, Start Num: 15
Candidate Starts for Rhodalysa_37:
(Start: 15 @28394 has 73 MA's), (30, 28328), (52, 28178), (55, 28142),

Gene: Rockstar_46 Start: 31256, Stop: 30981, Start Num: 15
Candidate Starts for Rockstar_46:
(6, 31343), (11, 31286), (Start: 15 @31256 has 73 MA's), (38, 31151), (48, 31079), (53, 31031),

Gene: Roimos_46 Start: 31635, Stop: 31360, Start Num: 15
Candidate Starts for Roimos_46:
(Start: 15 @31635 has 73 MA's), (48, 31458), (53, 31410),

Gene: Rummer_49 Start: 32339, Stop: 32091, Start Num: 22
Candidate Starts for Rummer_49:
(Start: 22 @32339 has 88 MA's), (33, 32285), (44, 32222), (46, 32198), (48, 32189), (53, 32141), (54, 32126),

Gene: Sabia_50 Start: 32302, Stop: 32054, Start Num: 22
Candidate Starts for Sabia_50:
(Start: 22 @32302 has 88 MA's), (33, 32248), (44, 32185), (46, 32161), (48, 32152), (53, 32104), (54, 32089),

Gene: Sabinator_49 Start: 32307, Stop: 32059, Start Num: 22
Candidate Starts for Sabinator_49:
(Start: 22 @32307 has 88 MA's), (33, 32253), (44, 32190), (46, 32166), (48, 32157), (53, 32109), (54, 32094),

Gene: SaturnRing_47 Start: 31838, Stop: 31563, Start Num: 15
Candidate Starts for SaturnRing_47:
(Start: 15 @31838 has 73 MA's), (48, 31661), (53, 31613),

Gene: Scorpia_44 Start: 31052, Stop: 30789, Start Num: 21
Candidate Starts for Scorpia_44:
(9, 31130), (Start: 21 @31052 has 35 MA's), (Start: 23 @31043 has 3 MA's), (26, 31022), (Start: 32 @31001 has 2 MA's), (51, 30884), (52, 30860),

Gene: Scout_46 Start: 30966, Stop: 30691, Start Num: 15
Candidate Starts for Scout_46:
(Start: 15 @30966 has 73 MA's), (48, 30789), (53, 30741),

Gene: Shep_46 Start: 30680, Stop: 30405, Start Num: 15
Candidate Starts for Shep_46:
(Start: 15 @30680 has 73 MA's), (48, 30503), (53, 30455),

Gene: Shuman_37 Start: 28407, Stop: 28135, Start Num: 15
Candidate Starts for Shuman_37:
(Start: 15 @28407 has 73 MA's), (30, 28341), (52, 28191), (55, 28155),

Gene: Snickers_50 Start: 32282, Stop: 32034, Start Num: 22
Candidate Starts for Snickers_50:
(Start: 22 @32282 has 88 MA's), (33, 32228), (44, 32165), (46, 32141), (48, 32132), (53, 32084), (54, 32069),

Gene: SoYo_50 Start: 32220, Stop: 31972, Start Num: 22
Candidate Starts for SoYo_50:
(Start: 22 @32220 has 88 MA's), (33, 32166), (44, 32103), (46, 32079), (48, 32070), (53, 32022), (54, 32007),

Gene: SoilDragon_50 Start: 31756, Stop: 31508, Start Num: 22
Candidate Starts for SoilDragon_50:

(Start: 22 @31756 has 88 MA's), (33, 31702), (34, 31699), (44, 31639), (46, 31615), (48, 31606), (53, 31558), (54, 31543),

Gene: Soshari_52 Start: 32335, Stop: 32087, Start Num: 22
Candidate Starts for Soshari_52:
(Start: 22 @32335 has 88 MA's), (33, 32281), (44, 32218), (46, 32194), (48, 32185), (53, 32137), (54, 32122),

Gene: Spike509_50 Start: 32336, Stop: 32088, Start Num: 22
Candidate Starts for Spike509_50:
(Start: 22 @32336 has 88 MA's), (33, 32282), (44, 32219), (46, 32195), (48, 32186), (53, 32138), (54, 32123),

Gene: StCroix_37 Start: 28407, Stop: 28135, Start Num: 15
Candidate Starts for StCroix_37:
(Start: 15 @28407 has 73 MA's), (52, 28191), (55, 28155),

Gene: Stagni_50 Start: 32311, Stop: 32063, Start Num: 22
Candidate Starts for Stagni_50:
(Start: 22 @32311 has 88 MA's), (33, 32257), (44, 32194), (46, 32170), (48, 32161), (53, 32113), (54, 32098),

Gene: StepMih_50 Start: 32302, Stop: 32054, Start Num: 22
Candidate Starts for StepMih_50:
(Start: 22 @32302 has 88 MA's), (33, 32248), (44, 32185), (46, 32161), (48, 32152), (53, 32104), (54, 32089),

Gene: Swann_37 Start: 28394, Stop: 28122, Start Num: 15
Candidate Starts for Swann_37:
(Start: 15 @28394 has 73 MA's), (30, 28328), (52, 28178), (55, 28142),

Gene: Swirley_43 Start: 31587, Stop: 31324, Start Num: 21
Candidate Starts for Swirley_43:
(Start: 21 @31587 has 35 MA's), (Start: 23 @31578 has 3 MA's), (Start: 32 @31536 has 2 MA's), (37, 31506), (45, 31452), (51, 31419), (53, 31386),

Gene: SydNat_42 Start: 31777, Stop: 31514, Start Num: 21
Candidate Starts for SydNat_42:
(Start: 21 @31777 has 35 MA's), (Start: 23 @31768 has 3 MA's), (Start: 32 @31726 has 2 MA's), (37, 31696), (45, 31642), (51, 31609), (53, 31576),

Gene: TNguyen7_47 Start: 31805, Stop: 31530, Start Num: 15
Candidate Starts for TNguyen7_47:
(Start: 15 @31805 has 73 MA's), (48, 31628), (53, 31580),

Gene: TWAMP_37 Start: 28394, Stop: 28122, Start Num: 15
Candidate Starts for TWAMP_37:
(Start: 15 @28394 has 73 MA's), (30, 28328), (52, 28178), (55, 28142),

Gene: Tailonex_29 Start: 27177, Stop: 26944, Start Num: 20
Candidate Starts for Tailonex_29:
(20, 27177), (40, 27099),

Gene: Takoda_37 Start: 28367, Stop: 28095, Start Num: 15
Candidate Starts for Takoda_37:
(Start: 15 @28367 has 73 MA's), (30, 28301), (52, 28151), (55, 28115),

Gene: Tarynearal_39 Start: 31029, Stop: 30766, Start Num: 21
Candidate Starts for Tarynearal_39:
(Start: 21 @31029 has 35 MA's), (Start: 23 @31020 has 3 MA's), (Start: 32 @30978 has 2 MA's), (37, 30948), (45, 30894), (51, 30861), (53, 30828),

Gene: Taurus_51 Start: 32308, Stop: 32060, Start Num: 22
Candidate Starts for Taurus_51:
(Start: 22 @32308 has 88 MA's), (33, 32254), (44, 32191), (46, 32167), (48, 32158), (53, 32110), (54, 32095),

Gene: Texage_45 Start: 32082, Stop: 31807, Start Num: 15
Candidate Starts for Texage_45:
(4, 32172), (6, 32163), (Start: 15 @32082 has 73 MA's), (48, 31905),

Gene: Theia_38 Start: 31043, Stop: 30789, Start Num: 23
Candidate Starts for Theia_38:
(Start: 21 @31052 has 35 MA's), (Start: 23 @31043 has 3 MA's), (24, 31034), (28, 31013), (Start: 32 @31001 has 2 MA's), (45, 30917), (51, 30884), (53, 30851),

Gene: Tiffany_50 Start: 32194, Stop: 31946, Start Num: 22
Candidate Starts for Tiffany_50:
(Start: 22 @32194 has 88 MA's), (33, 32140), (44, 32077), (46, 32053), (48, 32044), (53, 31996), (54, 31981),

Gene: Tiger_39 Start: 30576, Stop: 30322, Start Num: 23
Candidate Starts for Tiger_39:
(Start: 21 @30585 has 35 MA's), (Start: 23 @30576 has 3 MA's), (24, 30567), (28, 30546), (Start: 32 @30534 has 2 MA's), (45, 30450), (51, 30417), (53, 30384),

Gene: TinyPebbles_49 Start: 32341, Stop: 32093, Start Num: 22
Candidate Starts for TinyPebbles_49:
(Start: 22 @32341 has 88 MA's), (33, 32287), (44, 32224), (46, 32200), (48, 32191), (53, 32143), (54, 32128),

Gene: Todacoro_46 Start: 32081, Stop: 31806, Start Num: 15
Candidate Starts for Todacoro_46:
(4, 32171), (6, 32162), (Start: 15 @32081 has 73 MA's), (48, 31904),

Gene: Toro_49 Start: 34178, Stop: 33957, Start Num: 25
Candidate Starts for Toro_49:
(16, 34220), (25, 34178), (27, 34169), (39, 34121), (43, 34109), (49, 34052), (55, 33980),

Gene: Twigg_41 Start: 31226, Stop: 30963, Start Num: 21
Candidate Starts for Twigg_41:
(Start: 21 @31226 has 35 MA's), (Start: 23 @31217 has 3 MA's), (24, 31208), (28, 31187), (Start: 32 @31175 has 2 MA's), (45, 31091), (51, 31058), (53, 31025),

Gene: UhSalsa_37 Start: 28395, Stop: 28123, Start Num: 15
Candidate Starts for UhSalsa_37:

(Start: 15 @28395 has 73 MA's), (30, 28329), (52, 28179), (55, 28143),

Gene: UnionJack_41 Start: 30553, Stop: 30302, Start Num: 21
Candidate Starts for UnionJack_41:
(7, 30643), (9, 30631), (Start: 21 @30553 has 35 MA's), (Start: 23 @30544 has 3 MA's), (Start: 32 @30502 has 2 MA's), (37, 30472), (45, 30418), (51, 30385), (53, 30352),

Gene: Veracruz_45 Start: 32081, Stop: 31806, Start Num: 15
Candidate Starts for Veracruz_45:
(4, 32171), (6, 32162), (Start: 15 @32081 has 73 MA's), (48, 31904),

Gene: Vix_50 Start: 32391, Stop: 32143, Start Num: 22
Candidate Starts for Vix_50:
(Start: 22 @32391 has 88 MA's), (33, 32337), (44, 32274), (46, 32250), (48, 32241), (53, 32193), (54, 32178),

Gene: Watson_50 Start: 32300, Stop: 32052, Start Num: 22
Candidate Starts for Watson_50:
(Start: 22 @32300 has 88 MA's), (33, 32246), (44, 32183), (46, 32159), (48, 32150), (53, 32102), (54, 32087),

Gene: Wooldri_52 Start: 32220, Stop: 31972, Start Num: 22
Candidate Starts for Wooldri_52:
(Start: 22 @32220 has 88 MA's), (33, 32166), (44, 32103), (46, 32079), (48, 32070), (53, 32022), (54, 32007),

Gene: Yogi_37 Start: 28368, Stop: 28096, Start Num: 15
Candidate Starts for Yogi_37:
(Start: 15 @28368 has 73 MA's), (30, 28302), (52, 28152), (55, 28116),

Gene: Yoncess_37 Start: 28369, Stop: 28097, Start Num: 15
Candidate Starts for Yoncess_37:
(Start: 15 @28369 has 73 MA's), (30, 28303), (52, 28153), (55, 28117),

Gene: Zarafa_46 Start: 31728, Stop: 31453, Start Num: 15
Candidate Starts for Zarafa_46:
(Start: 15 @31728 has 73 MA's), (48, 31551), (53, 31503),

Gene: Zetzy_49 Start: 31871, Stop: 31623, Start Num: 22
Candidate Starts for Zetzy_49:
(Start: 22 @31871 has 88 MA's), (33, 31817), (41, 31784), (44, 31754), (46, 31730), (48, 31721), (53, 31673), (54, 31658),

Gene: Zolita_41 Start: 31781, Stop: 31518, Start Num: 21
Candidate Starts for Zolita_41:
(Start: 21 @31781 has 35 MA's), (Start: 23 @31772 has 3 MA's), (Start: 32 @31730 has 2 MA's), (37, 31700), (45, 31646), (51, 31613), (53, 31580),