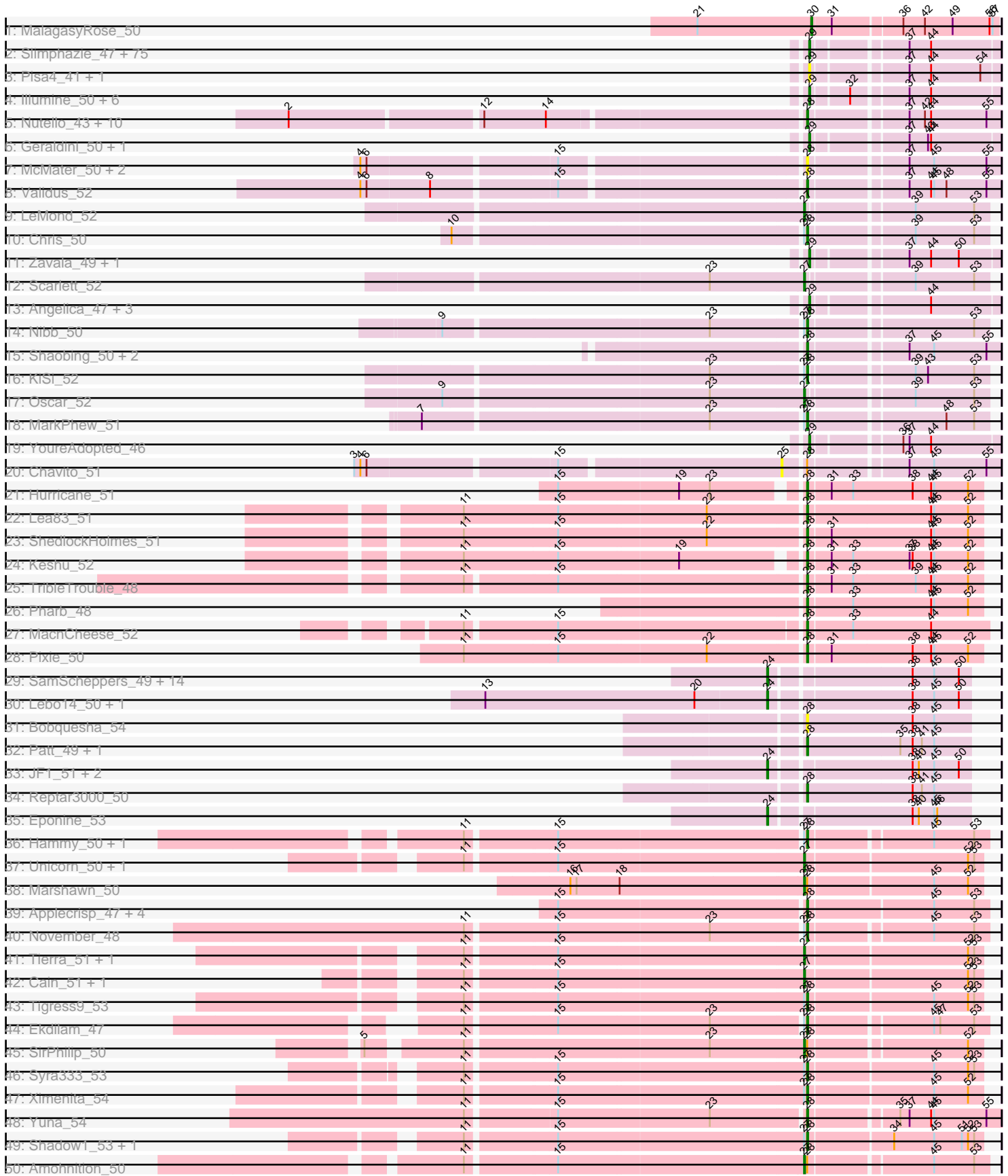


Pham 311267



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 311267 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311267 has 180 members, 14 are drafts.

Phages represented in each track:

- Track 1 : MalagasyRose_50
- Track 2 : Slimphazie_47, ActinUp_47, Padfoot_47, Topper_47, Llorens_47, Jayhawk_48, BarrelRoll_47, Efra2_50, Dalmuri_47, Hyperbowlee_47, CaseJules_49, Tiri_48, Jeckyll_47, Rosmarinus_47, MacKat_42, AlishaPH_47, CREW_47, Megsy_49, TruffulaTree_47, BaghaKamala_46, Boiii_47, DartGoblin_49, BGIluviae_47, Bella96_48, Apocalypse_50, Joy99_47, Asayake_47, Anma_49, LindNT_46, CheetoDust_46, Bern_48, Blizzard_47, Zabiza_42, Ramen_48, Atiba_48, Rapunzel97_48, Veliki_48, Adonis_47, BEEST_47, Urkel_48, Adephagia_47, Homura_47, Prithvi_48, Pokerus_46, TingHuaYa_48, Yunkel11_50, Padpat_49, Inky_47, Spock_47, JAWS_47, Lunahalos_47, Guanica15_50, Capricorn_47, TreyKay_48, Anaya_49, HedwigODU_47, Ganymede_48, LastHope_50, QuincyRose_46, TaiwanKao_49, CallaLilly_47, Curiosium_49, ShiaSurprise_48, Durfee_47, Piatt_47, Emerson_48, Tachez_47, CrimD_47, SamuelLPlaqson_48, Clipper_50, Jarvi_47, Twitch_47, TiniBug_48, Belladonna_47, Peel_47, DrHayes_48
- Track 3 : Pisa4_41, Pisa1_47
- Track 4 : Illumine_50, LaterM_48, Ageofdapage_49, Murucutumbu_48, Dole_50, Devera_52, Stinson_48
- Track 5 : Nutello_43, Amelie_43, Nikao_46, Teejan_45, LilPharaoh_43, SgtBeansprout_43, Torres_46, Trice_43, Binglebops_43, Enkosi_45, Mdavu_44
- Track 6 : Geraldini_50, Beezoo_49
- Track 7 : McMater_50, Dartin_50, Richo_50
- Track 8 : Validus_52
- Track 9 : LeMond_52
- Track 10 : Chris_50
- Track 11 : Zavala_49, Mynx_48
- Track 12 : Scarlett_52
- Track 13 : Angelica_47, MeaningOfLife_48, Deby_47, Sulley_47
- Track 14 : Nibb_50
- Track 15 : Shaobing_50, Niklas_50, Peanam_50
- Track 16 : KiSi_52
- Track 17 : Oscar_52
- Track 18 : MarkPhew_51
- Track 19 : YoureAdopted_46
- Track 20 : Chavito_51
- Track 21 : Hurricane_51
- Track 22 : Lea83_51
- Track 23 : ShedlockHolmes_51

- Track 24 : Keshu_52
- Track 25 : TribbleTrouble_48
- Track 26 : Pharb_48
- Track 27 : MacnCheese_52
- Track 28 : Pixie_50
- Track 29 : SamScheppers_49, Chancellor_51, Fionnbharth_51, Malthus_52, YasnayaPolyana_51, Juliette_53, Cheetobro_51, Taquito_51, Slarp_51, Wintermute_51, OmniCritical_50, Ruthiejr_52, Mitti_51, Qhanda_53, Kraw_51
- Track 30 : Lebo14_50, DanSyl44_54
- Track 31 : Bobquesha_54
- Track 32 : Patt_49, MissDaisy_50
- Track 33 : JF1_51, Y10_50, Y2_50
- Track 34 : Reptar3000_50
- Track 35 : Eponine_53
- Track 36 : Hammy_50, DARTH_P_50
- Track 37 : Unicorn_50, PhelpsODU_50
- Track 38 : Marshawn_50
- Track 39 : Applecrisp_47, Ellie_46, Amgine_48, Fefferhead_48, Lavahound_47
- Track 40 : November_48
- Track 41 : Tierra_51, Krueger_54
- Track 42 : Cain_51, Bryler_51
- Track 43 : Tigress9_53
- Track 44 : Ekdilam_47
- Track 45 : SirPhilip_50
- Track 46 : Syra333_53
- Track 47 : Ximenita_54
- Track 48 : Yuna_54
- Track 49 : Shadow1_53, Sunflower1121_54
- Track 50 : Amohnition_50
- Track 51 : TClif_52
- Track 52 : Phrank_51

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

The start number called the most often in the published annotations is 29, it was called in 89 of the 166 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_47, Adephagia_47, Adonis_47, Ageofdapage_49, AlishaPH_47, Anaya_49, Angelica_47, Anma_49, Apocalypse_50, Asayake_47, Atiba_48, BEEST_47, BGlluviae_47, BaghaKamala_46, BarrelRoll_47, Beezoo_49, Bella96_48, Belladonna_47, Bern_48, Blizzard_47, Boiiii_47, CREW_47, CallaLilly_47, Capricorn_47, CaseJules_49, CheetoDust_46, Clipper_50, CrimD_47, Curiosium_49, Dalmuri_47, DartGoblin_49, Deby_47, Devera_52, Dole_50, DrHayes_48, Durfee_47, Efra2_50, Emerson_48, Ganymede_48, Geraldini_50, Guanica15_50, HedwigODU_47, Homura_47, Hyperbowlee_47, Illumine_50, Inky_47, JAWS_47, Jarvi_47, Jayhawk_48, Jeckyll_47, Joy99_47, LastHope_50, LaterM_48, LindNT_46, Llorens_47, Lunahalos_47, MacKat_42, MeaningOfLife_48, Megsy_49, Murucutumbu_48, Mynx_48, Padfoot_47, Padpat_49, Peel_47, Piatt_47, Pisa1_47, Pisa4_41, Pokerus_46, Prithvi_48, QuincyRose_46, Ramen_48, Rapunzel97_48,

Rosmarinus_47, SamuelLPlaqson_48, ShiaSurprise_48, Slimphazie_47, Spock_47, Stinson_48, Sulley_47, Tachez_47, TaiwanKao_49, TingHuaYa_48, TiniBug_48, Tiri_48, Topper_47, TreyKay_48, TruffulaTree_47, Twitch_47, Urkel_48, Veliki_48, YoureAdopted_46, Yunkel11_50, Zabiza_42, Zavala_49,

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

-

Genes that do not have the "Most Annotated" start:

- Amelie_43, Amgine_48, Amohnition_50, Applecrisp_47, Biglebops_43, Bobquesha_54, Bryler_51, Cain_51, Chancellor_51, Chavito_51, Cheetobro_51, Chris_50, DanSyl44_54, DarthP_50, Dartin_50, Ekdilam_47, Ellie_46, Enkosi_45, Eponine_53, Fefferhead_48, Fionnbharth_51, Hammy_50, Hurricane_51, JF1_51, Juliette_53, Keshu_52, KiSi_52, Kraw_51, Krueger_54, Lavahound_47, LeMond_52, Lea83_51, Lebo14_50, LilPharaoh_43, MacnCheese_52, MalagasyRose_50, Malthus_52, MarkPhew_51, Marshawn_50, McMater_50, Mdavu_44, MissDaisy_50, Mitti_51, Nibb_50, Nikao_46, Niklas_50, November_48, Nutello_43, OmniCritical_50, Oscar_52, Patt_49, Peanam_50, Pharb_48, PhelpsODU_50, Phrank_51, Pixie_50, Qhanda_53, Reptar3000_50, Richo_50, Ruthiejr_52, SamScheppers_49, Scarlett_52, SgtBeansprout_43, Shadow1_53, Shaobing_50, ShedlockHolmes_51, SirPhilip_50, Slarp_51, Sunflower1121_54, Syra333_53, TClif_52, Taquito_51, Teejan_45, Tierra_51, Tigress9_53, Torres_46, TribbleTrouble_48, Trice_43, Unicorn_50, Validus_52, Wintermute_51, Ximenita_54, Y10_50, Y2_50, YasnayaPolyana_51, Yuna_54,

Summary by start number:

Start 24:

- Found in 21 of 180 (11.7%) of genes in pham
- Manual Annotations of this start: 19 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chancellor_51 (K4), Cheetobro_51 (K4), DanSyl44_54 (K4), Eponine_53 (K4), Fionnbharth_51 (K4), JF1_51 (K4), Juliette_53 (K4), Kraw_51 (K4), Lebo14_50 (K4), Malthus_52 (K4), Mitti_51 (K4), OmniCritical_50 (K4), Qhanda_53 (K4), Ruthiejr_52 (K4), SamScheppers_49 (K4), Slarp_51 (K4), Taquito_51 (K4), Wintermute_51 (K4), Y10_50 (K4), Y2_50 (K4), YasnayaPolyana_51 (K4),

Start 25:

- Found in 1 of 180 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chavito_51 (K1),

Start 27:

- Found in 27 of 180 (15.0%) of genes in pham
- Manual Annotations of this start: 14 of 166
- Called 51.9% of time when present
- Phage (with cluster) where this start called: Amohnition_50 (K6), Bryler_51 (K6), Cain_51 (K6), Krueger_54 (K6), LeMond_52 (K1), Marshawn_50 (K6), Oscar_52 (K1), PhelpsODU_50 (K6), Phrank_51 (K6), Scarlett_52 (K1), SirPhilip_50 (K6), TClif_52 (K6), Tierra_51 (K6), Unicorn_50 (K6),

Start 28:

- Found in 53 of 180 (29.4%) of genes in pham
- Manual Annotations of this start: 43 of 166
- Called 92.5% of time when present
- Phage (with cluster) where this start called: Amelie_43 (K1), Amgine_48 (K6), Applecrisp_47 (K6), Binglebops_43 (K1), Bobquesha_54 (K4), Chris_50 (K1), DarthP_50 (K6), Dartin_50 (K1), Ekdilam_47 (K6), Ellie_46 (K6), Enkosi_45 (K1), Fefferhead_48 (K6), Hammy_50 (K6), Hurricane_51 (K3), Keshu_52 (K3), KiSi_52 (K1), Lavahound_47 (K6), Lea83_51 (K3), LilPharaoh_43 (K1), MacnCheese_52 (K3), MarkPheW_51 (K1), McMater_50 (K1), Mdavu_44 (K1), MissDaisy_50 (K4), Nibb_50 (K1), Nikao_46 (K1), Niklas_50 (K1), November_48 (K6), Nutello_43 (K1), Patt_49 (K4), Peanam_50 (K1), Pharb_48 (K3), Pixie_50 (K3), Reptar3000_50 (K4), Richo_50 (K1), SgtBeansprout_43 (K1), Shadow1_53 (K6), Shaobing_50 (K1), ShedlockHolmes_51 (K3), Sunflower1121_54 (K6), Syra333_53 (K6), Teejan_45 (K1), Tigress9_53 (K6), Torres_46 (K1), TribbleTrouble_48 (K3), Trice_43 (K1), Validus_52 (K1), Ximenita_54 (K6), Yuna_54 (K6),

Start 29:

- Found in 94 of 180 (52.2%) of genes in pham
- Manual Annotations of this start: 89 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ActinUp_47 (K1), Adephegia_47 (K1), Adonis_47 (K1), Ageofdapage_49 (K1), AlishaPH_47 (K1), Anaya_49 (K1), Angelica_47 (K1), Anma_49 (K1), Apocalypse_50 (K1), Asayake_47 (K1), Atiba_48 (K1), BEEST_47 (K1), BGlluviae_47 (K1), BaghaKamala_46 (K1), BarrelRoll_47 (K1), Beezoo_49 (K1), Bella96_48 (K1), Belladonna_47 (K1), Bern_48 (K1), Blizzard_47 (K1), Boiiii_47 (K1), CREW_47 (K1), CallaLilly_47 (K1), Capricorn_47 (K1), CaseJules_49 (K1), CheetoDust_46 (K1), Clipper_50 (K1), CrimD_47 (K1), Curiosium_49 (K1), Dalmuri_47 (K1), DartGoblin_49 (K1), Deby_47 (K1), Devera_52 (K1), Dole_50 (K1), DrHayes_48 (K1), Durfee_47 (K1), Efra2_50 (K1), Emerson_48 (K1), Ganymede_48 (K1), Geraldini_50 (K1), Guanica15_50 (K1), HedwigODU_47 (K1), Homura_47 (K1), Hyperbowlee_47 (K1), Illumine_50 (K1), Inky_47 (K1), JAWS_47 (K1), Jarvi_47 (K1), Jayhawk_48 (K1), Jeckyll_47 (K1), Joy99_47 (K1), LastHope_50 (K1), LaterM_48 (K1), LindNT_46 (K1), Llorens_47 (K1), Lunahalos_47 (K1), MacKat_42 (K1), MeaningOfLife_48 (K1), Megsy_49 (K1), Murucutumbu_48 (K1), Mynx_48 (K1), Padfoot_47 (K1), Padpat_49 (K1), Peel_47 (K1), Piatt_47 (K1), Pisa1_47 (K1), Pisa4_41 (K1), Pokerus_46 (K1), Prithvi_48 (K1), QuincyRose_46 (K1), Ramen_48 (K1), Rapunzel97_48 (K1), Rosmarinus_47 (K1), SamuelLPlaqson_48 (K1), ShiaSurprise_48 (K1), Slimphazie_47 (K1), Spock_47 (K1), Stinson_48 (K1), Sulley_47 (K1), Tachez_47 (K1), TaiwanKao_49 (K1), TingHuaYa_48 (K1), TiniBug_48 (K1), Tiri_48 (K1), Topper_47 (K1), TreyKay_48 (K1), TruffulaTree_47 (K1), Twitch_47 (K1), Urkel_48 (K1), Veliki_48 (K1), YoureAdopted_46 (K1), Yunkel11_50 (K1), Zabiza_42 (K1), Zavala_49 (K1),

Start 30:

- Found in 1 of 180 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose_50 (AG),

Summary by clusters:

There are 5 clusters represented in this pham: K3, K1, K6, AG, K4,

Info for manual annotations of cluster AG:

- Start number 30 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

- Start number 27 was manually annotated 3 times for cluster K1.
- Start number 28 was manually annotated 17 times for cluster K1.
- Start number 29 was manually annotated 89 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 28 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 24 was manually annotated 19 times for cluster K4.
- Start number 28 was manually annotated 3 times for cluster K4.

Info for manual annotations of cluster K6:

- Start number 27 was manually annotated 11 times for cluster K6.
- Start number 28 was manually annotated 15 times for cluster K6.

Gene Information:

Gene: ActinUp_47 Start: 36195, Stop: 36362, Start Num: 29

Candidate Starts for ActinUp_47:

(Start: 29 @36195 has 89 MA's), (37, 36276), (44, 36297),

Gene: Adephagia_47 Start: 36192, Stop: 36359, Start Num: 29

Candidate Starts for Adephagia_47:

(Start: 29 @36192 has 89 MA's), (37, 36273), (44, 36294),

Gene: Adonis_47 Start: 36490, Stop: 36657, Start Num: 29

Candidate Starts for Adonis_47:

(Start: 29 @36490 has 89 MA's), (37, 36571), (44, 36592),

Gene: Ageofdapage_49 Start: 37175, Stop: 37342, Start Num: 29

Candidate Starts for Ageofdapage_49:

(Start: 29 @37175 has 89 MA's), (32, 37208), (37, 37256), (44, 37277),

Gene: AlishaPH_47 Start: 36465, Stop: 36632, Start Num: 29

Candidate Starts for AlishaPH_47:

(Start: 29 @36465 has 89 MA's), (37, 36546), (44, 36567),

Gene: Amelie_43 Start: 35852, Stop: 36028, Start Num: 28

Candidate Starts for Amelie_43:

(2, 35381), (12, 35558), (14, 35618), (Start: 28 @35852 has 43 MA's), (37, 35939), (42, 35954), (44, 35960), (55, 36014),

Gene: Amgine_48 Start: 37350, Stop: 37520, Start Num: 28

Candidate Starts for Amgine_48:

(15, 37119), (Start: 28 @37350 has 43 MA's), (45, 37467), (53, 37506),

Gene: Amohnition_50 Start: 37357, Stop: 37524, Start Num: 27
Candidate Starts for Amohnition_50:
(11, 37048), (15, 37129), (Start: 27 @37357 has 14 MA's), (Start: 28 @37360 has 43 MA's), (45, 37471), (53, 37510),

Gene: Anaya_49 Start: 36792, Stop: 36959, Start Num: 29
Candidate Starts for Anaya_49:
(Start: 29 @36792 has 89 MA's), (37, 36873), (44, 36894),

Gene: Angelica_47 Start: 36422, Stop: 36589, Start Num: 29
Candidate Starts for Angelica_47:
(Start: 29 @36422 has 89 MA's), (44, 36524),

Gene: Anma_49 Start: 37081, Stop: 37248, Start Num: 29
Candidate Starts for Anma_49:
(Start: 29 @37081 has 89 MA's), (37, 37162), (44, 37183),

Gene: Apocalypse_50 Start: 37201, Stop: 37368, Start Num: 29
Candidate Starts for Apocalypse_50:
(Start: 29 @37201 has 89 MA's), (37, 37282), (44, 37303),

Gene: Applecrisp_47 Start: 36846, Stop: 37016, Start Num: 28
Candidate Starts for Applecrisp_47:
(15, 36615), (Start: 28 @36846 has 43 MA's), (45, 36963), (53, 37002),

Gene: Asayake_47 Start: 36507, Stop: 36674, Start Num: 29
Candidate Starts for Asayake_47:
(Start: 29 @36507 has 89 MA's), (37, 36588), (44, 36609),

Gene: Atiba_48 Start: 36155, Stop: 36322, Start Num: 29
Candidate Starts for Atiba_48:
(Start: 29 @36155 has 89 MA's), (37, 36236), (44, 36257),

Gene: BEEST_47 Start: 36507, Stop: 36674, Start Num: 29
Candidate Starts for BEEST_47:
(Start: 29 @36507 has 89 MA's), (37, 36588), (44, 36609),

Gene: BGlluviae_47 Start: 36310, Stop: 36477, Start Num: 29
Candidate Starts for BGlluviae_47:
(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: BaghaKamala_46 Start: 35630, Stop: 35797, Start Num: 29
Candidate Starts for BaghaKamala_46:
(Start: 29 @35630 has 89 MA's), (37, 35711), (44, 35732),

Gene: BarrelRoll_47 Start: 36178, Stop: 36345, Start Num: 29
Candidate Starts for BarrelRoll_47:
(Start: 29 @36178 has 89 MA's), (37, 36259), (44, 36280),

Gene: Beezoo_49 Start: 37153, Stop: 37320, Start Num: 29
Candidate Starts for Beezoo_49:
(Start: 29 @37153 has 89 MA's), (37, 37234), (43, 37252), (44, 37255),

Gene: Bella96_48 Start: 37019, Stop: 37186, Start Num: 29
Candidate Starts for Bella96_48:
(Start: 29 @37019 has 89 MA's), (37, 37100), (44, 37121),

Gene: Belladonna_47 Start: 36310, Stop: 36477, Start Num: 29
Candidate Starts for Belladonna_47:
(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: Bern_48 Start: 35225, Stop: 35392, Start Num: 29
Candidate Starts for Bern_48:
(Start: 29 @35225 has 89 MA's), (37, 35306), (44, 35327),

Gene: Biglebops_43 Start: 35852, Stop: 36028, Start Num: 28
Candidate Starts for Biglebops_43:
(2, 35381), (12, 35558), (14, 35618), (Start: 28 @35852 has 43 MA's), (37, 35939), (42, 35954), (44, 35960), (55, 36014),

Gene: Blizzard_47 Start: 36507, Stop: 36674, Start Num: 29
Candidate Starts for Blizzard_47:
(Start: 29 @36507 has 89 MA's), (37, 36588), (44, 36609),

Gene: Bobquesha_54 Start: 36495, Stop: 36653, Start Num: 28
Candidate Starts for Bobquesha_54:
(Start: 28 @36495 has 43 MA's), (38, 36597), (45, 36618),

Gene: Boiiii_47 Start: 36509, Stop: 36676, Start Num: 29
Candidate Starts for Boiiii_47:
(Start: 29 @36509 has 89 MA's), (37, 36590), (44, 36611),

Gene: Bryler_51 Start: 36170, Stop: 36337, Start Num: 27
Candidate Starts for Bryler_51:
(11, 35855), (15, 35936), (Start: 27 @36170 has 14 MA's), (52, 36323), (53, 36329),

Gene: CREW_47 Start: 36310, Stop: 36477, Start Num: 29
Candidate Starts for CREW_47:
(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: Cain_51 Start: 36158, Stop: 36325, Start Num: 27
Candidate Starts for Cain_51:
(11, 35843), (15, 35924), (Start: 27 @36158 has 14 MA's), (52, 36311), (53, 36317),

Gene: CallaLilly_47 Start: 36233, Stop: 36400, Start Num: 29
Candidate Starts for CallaLilly_47:
(Start: 29 @36233 has 89 MA's), (37, 36314), (44, 36335),

Gene: Capricorn_47 Start: 36310, Stop: 36477, Start Num: 29
Candidate Starts for Capricorn_47:
(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: CaseJules_49 Start: 36507, Stop: 36674, Start Num: 29
Candidate Starts for CaseJules_49:
(Start: 29 @36507 has 89 MA's), (37, 36588), (44, 36609),

Gene: Chancellor_51 Start: 36908, Stop: 37090, Start Num: 24
Candidate Starts for Chancellor_51:
(Start: 24 @36908 has 19 MA's), (38, 37034), (45, 37055), (50, 37079),

Gene: Chavito_51 Start: 37741, Stop: 37935, Start Num: 25
Candidate Starts for Chavito_51:
(3, 37351), (4, 37357), (6, 37363), (15, 37537), (25, 37741), (Start: 28 @37759 has 43 MA's), (37, 37846), (45, 37870), (55, 37921),

Gene: CheetoDust_46 Start: 35679, Stop: 35846, Start Num: 29
Candidate Starts for CheetoDust_46:
(Start: 29 @35679 has 89 MA's), (37, 35760), (44, 35781),

Gene: Cheetobro_51 Start: 36905, Stop: 37087, Start Num: 24
Candidate Starts for Cheetobro_51:
(Start: 24 @36905 has 19 MA's), (38, 37031), (45, 37052), (50, 37076),

Gene: Chris_50 Start: 37221, Stop: 37385, Start Num: 28
Candidate Starts for Chris_50:
(10, 36897), (Start: 27 @37218 has 14 MA's), (Start: 28 @37221 has 43 MA's), (39, 37314), (53, 37371),

Gene: Clipper_50 Start: 36826, Stop: 36993, Start Num: 29
Candidate Starts for Clipper_50:
(Start: 29 @36826 has 89 MA's), (37, 36907), (44, 36928),

Gene: CrimD_47 Start: 36416, Stop: 36583, Start Num: 29
Candidate Starts for CrimD_47:
(Start: 29 @36416 has 89 MA's), (37, 36497), (44, 36518),

Gene: Curiosium_49 Start: 35148, Stop: 35315, Start Num: 29
Candidate Starts for Curiosium_49:
(Start: 29 @35148 has 89 MA's), (37, 35229), (44, 35250),

Gene: Dalmuri_47 Start: 36310, Stop: 36477, Start Num: 29
Candidate Starts for Dalmuri_47:
(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: DanSyl44_54 Start: 37949, Stop: 38131, Start Num: 24
Candidate Starts for DanSyl44_54:
(13, 37676), (20, 37880), (Start: 24 @37949 has 19 MA's), (38, 38075), (45, 38096), (50, 38120),

Gene: DartGoblin_49 Start: 36991, Stop: 37158, Start Num: 29
Candidate Starts for DartGoblin_49:
(Start: 29 @36991 has 89 MA's), (37, 37072), (44, 37093),

Gene: DarthP_50 Start: 37244, Stop: 37408, Start Num: 28
Candidate Starts for DarthP_50:
(11, 36932), (15, 37013), (Start: 27 @37241 has 14 MA's), (Start: 28 @37244 has 43 MA's), (45, 37355), (53, 37394),

Gene: Dartin_50 Start: 37097, Stop: 37273, Start Num: 28
Candidate Starts for Dartin_50:

(4, 36695), (6, 36701), (15, 36875), (Start: 28 @37097 has 43 MA's), (37, 37184), (45, 37208), (55, 37259),

Gene: Deby_47 Start: 36438, Stop: 36605, Start Num: 29

Candidate Starts for Deby_47:

(Start: 29 @36438 has 89 MA's), (44, 36540),

Gene: Devera_52 Start: 36963, Stop: 37130, Start Num: 29

Candidate Starts for Devera_52:

(Start: 29 @36963 has 89 MA's), (32, 36996), (37, 37044), (44, 37065),

Gene: Dole_50 Start: 36965, Stop: 37132, Start Num: 29

Candidate Starts for Dole_50:

(Start: 29 @36965 has 89 MA's), (32, 36998), (37, 37046), (44, 37067),

Gene: DrHayes_48 Start: 37081, Stop: 37248, Start Num: 29

Candidate Starts for DrHayes_48:

(Start: 29 @37081 has 89 MA's), (37, 37162), (44, 37183),

Gene: Durfee_47 Start: 36507, Stop: 36674, Start Num: 29

Candidate Starts for Durfee_47:

(Start: 29 @36507 has 89 MA's), (37, 36588), (44, 36609),

Gene: Efra2_50 Start: 36032, Stop: 36199, Start Num: 29

Candidate Starts for Efra2_50:

(Start: 29 @36032 has 89 MA's), (37, 36113), (44, 36134),

Gene: Ekdilam_47 Start: 36788, Stop: 36952, Start Num: 28

Candidate Starts for Ekdilam_47:

(11, 36476), (15, 36557), (23, 36701), (Start: 27 @36785 has 14 MA's), (Start: 28 @36788 has 43 MA's), (45, 36899), (47, 36905), (53, 36938),

Gene: Ellie_46 Start: 36538, Stop: 36708, Start Num: 28

Candidate Starts for Ellie_46:

(15, 36307), (Start: 28 @36538 has 43 MA's), (45, 36655), (53, 36694),

Gene: Emerson_48 Start: 36186, Stop: 36353, Start Num: 29

Candidate Starts for Emerson_48:

(Start: 29 @36186 has 89 MA's), (37, 36267), (44, 36288),

Gene: Enkosi_45 Start: 38465, Stop: 38641, Start Num: 28

Candidate Starts for Enkosi_45:

(2, 37994), (12, 38171), (14, 38231), (Start: 28 @38465 has 43 MA's), (37, 38552), (42, 38567), (44, 38573), (55, 38627),

Gene: Eponine_53 Start: 37661, Stop: 37843, Start Num: 24

Candidate Starts for Eponine_53:

(Start: 24 @37661 has 19 MA's), (38, 37787), (40, 37793), (45, 37808), (46, 37811),

Gene: Fefferhead_48 Start: 36488, Stop: 36658, Start Num: 28

Candidate Starts for Fefferhead_48:

(15, 36257), (Start: 28 @36488 has 43 MA's), (45, 36605), (53, 36644),

Gene: Fionnbharth_51 Start: 37059, Stop: 37241, Start Num: 24
Candidate Starts for Fionnbharth_51:
(Start: 24 @37059 has 19 MA's), (38, 37185), (45, 37206), (50, 37230),

Gene: Ganymede_48 Start: 36625, Stop: 36792, Start Num: 29
Candidate Starts for Ganymede_48:
(Start: 29 @36625 has 89 MA's), (37, 36706), (44, 36727),

Gene: Geraldini_50 Start: 37242, Stop: 37409, Start Num: 29
Candidate Starts for Geraldini_50:
(Start: 29 @37242 has 89 MA's), (37, 37323), (43, 37341), (44, 37344),

Gene: Guanica15_50 Start: 35989, Stop: 36156, Start Num: 29
Candidate Starts for Guanica15_50:
(Start: 29 @35989 has 89 MA's), (37, 36070), (44, 36091),

Gene: Hammy_50 Start: 37232, Stop: 37396, Start Num: 28
Candidate Starts for Hammy_50:
(11, 36920), (15, 37001), (Start: 27 @37229 has 14 MA's), (Start: 28 @37232 has 43 MA's), (45, 37343), (53, 37382),

Gene: HedwigODU_47 Start: 36195, Stop: 36362, Start Num: 29
Candidate Starts for HedwigODU_47:
(Start: 29 @36195 has 89 MA's), (37, 36276), (44, 36297),

Gene: Homura_47 Start: 36310, Stop: 36477, Start Num: 29
Candidate Starts for Homura_47:
(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: Hurricane_51 Start: 36986, Stop: 37153, Start Num: 28
Candidate Starts for Hurricane_51:
(15, 36767), (19, 36881), (23, 36911), (Start: 28 @36986 has 43 MA's), (31, 37007), (33, 37028), (38, 37085), (44, 37103), (45, 37106), (52, 37139),

Gene: Hyperbowlee_47 Start: 36507, Stop: 36674, Start Num: 29
Candidate Starts for Hyperbowlee_47:
(Start: 29 @36507 has 89 MA's), (37, 36588), (44, 36609),

Gene: Illumine_50 Start: 36965, Stop: 37132, Start Num: 29
Candidate Starts for Illumine_50:
(Start: 29 @36965 has 89 MA's), (32, 36998), (37, 37046), (44, 37067),

Gene: Inky_47 Start: 36310, Stop: 36477, Start Num: 29
Candidate Starts for Inky_47:
(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: JAWS_47 Start: 36184, Stop: 36351, Start Num: 29
Candidate Starts for JAWS_47:
(Start: 29 @36184 has 89 MA's), (37, 36265), (44, 36286),

Gene: JF1_51 Start: 36976, Stop: 37158, Start Num: 24
Candidate Starts for JF1_51:
(Start: 24 @36976 has 19 MA's), (38, 37102), (40, 37108), (45, 37123), (50, 37147),

Gene: Jarvi_47 Start: 36310, Stop: 36477, Start Num: 29

Candidate Starts for Jarvi_47:

(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: Jayhawk_48 Start: 36193, Stop: 36360, Start Num: 29

Candidate Starts for Jayhawk_48:

(Start: 29 @36193 has 89 MA's), (37, 36274), (44, 36295),

Gene: Jeckyll_47 Start: 36310, Stop: 36477, Start Num: 29

Candidate Starts for Jeckyll_47:

(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: Joy99_47 Start: 36239, Stop: 36406, Start Num: 29

Candidate Starts for Joy99_47:

(Start: 29 @36239 has 89 MA's), (37, 36320), (44, 36341),

Gene: Juliette_53 Start: 37132, Stop: 37314, Start Num: 24

Candidate Starts for Juliette_53:

(Start: 24 @37132 has 19 MA's), (38, 37258), (45, 37279), (50, 37303),

Gene: Keshu_52 Start: 37053, Stop: 37220, Start Num: 28

Candidate Starts for Keshu_52:

(11, 36744), (15, 36834), (19, 36948), (Start: 28 @37053 has 43 MA's), (31, 37074), (33, 37095), (37, 37149), (38, 37152), (44, 37170), (45, 37173), (52, 37206),

Gene: KiSi_52 Start: 37604, Stop: 37765, Start Num: 28

Candidate Starts for KiSi_52:

(23, 37517), (Start: 27 @37601 has 14 MA's), (Start: 28 @37604 has 43 MA's), (39, 37694), (43, 37706), (53, 37751),

Gene: Kraw_51 Start: 36820, Stop: 37002, Start Num: 24

Candidate Starts for Kraw_51:

(Start: 24 @36820 has 19 MA's), (38, 36946), (45, 36967), (50, 36991),

Gene: Krueger_54 Start: 37164, Stop: 37331, Start Num: 27

Candidate Starts for Krueger_54:

(11, 36849), (15, 36930), (Start: 27 @37164 has 14 MA's), (52, 37317), (53, 37323),

Gene: LastHope_50 Start: 35467, Stop: 35634, Start Num: 29

Candidate Starts for LastHope_50:

(Start: 29 @35467 has 89 MA's), (37, 35548), (44, 35569),

Gene: LaterM_48 Start: 37072, Stop: 37239, Start Num: 29

Candidate Starts for LaterM_48:

(Start: 29 @37072 has 89 MA's), (32, 37105), (37, 37153), (44, 37174),

Gene: Lavahound_47 Start: 37471, Stop: 37641, Start Num: 28

Candidate Starts for Lavahound_47:

(15, 37240), (Start: 28 @37471 has 43 MA's), (45, 37588), (53, 37627),

Gene: LeMond_52 Start: 37585, Stop: 37749, Start Num: 27

Candidate Starts for LeMond_52:

(Start: 27 @37585 has 14 MA's), (39, 37678), (53, 37735),

Gene: Lea83_51 Start: 37039, Stop: 37206, Start Num: 28

Candidate Starts for Lea83_51:

(11, 36718), (15, 36808), (22, 36949), (Start: 28 @37039 has 43 MA's), (44, 37156), (45, 37159), (52, 37192),

Gene: Lebo14_50 Start: 37084, Stop: 37266, Start Num: 24

Candidate Starts for Lebo14_50:

(13, 36811), (20, 37015), (Start: 24 @37084 has 19 MA's), (38, 37210), (45, 37231), (50, 37255),

Gene: LilPharaoh_43 Start: 35580, Stop: 35756, Start Num: 28

Candidate Starts for LilPharaoh_43:

(2, 35109), (12, 35286), (14, 35346), (Start: 28 @35580 has 43 MA's), (37, 35667), (42, 35682), (44, 35688), (55, 35742),

Gene: LindNT_46 Start: 36395, Stop: 36562, Start Num: 29

Candidate Starts for LindNT_46:

(Start: 29 @36395 has 89 MA's), (37, 36476), (44, 36497),

Gene: Llorens_47 Start: 36310, Stop: 36477, Start Num: 29

Candidate Starts for Llorens_47:

(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: Lunahalos_47 Start: 36310, Stop: 36477, Start Num: 29

Candidate Starts for Lunahalos_47:

(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: MacKat_42 Start: 31710, Stop: 31877, Start Num: 29

Candidate Starts for MacKat_42:

(Start: 29 @31710 has 89 MA's), (37, 31791), (44, 31812),

Gene: MacnCheese_52 Start: 37944, Stop: 38117, Start Num: 28

Candidate Starts for MacnCheese_52:

(11, 37635), (15, 37716), (Start: 28 @37944 has 43 MA's), (33, 37986), (44, 38061),

Gene: MalagasyRose_50 Start: 35187, Stop: 35360, Start Num: 30

Candidate Starts for MalagasyRose_50:

(21, 35076), (Start: 30 @35187 has 1 MA's), (31, 35205), (36, 35268), (42, 35289), (49, 35316), (56, 35352), (57, 35355),

Gene: Malthus_52 Start: 36820, Stop: 37002, Start Num: 24

Candidate Starts for Malthus_52:

(Start: 24 @36820 has 19 MA's), (38, 36946), (45, 36967), (50, 36991),

Gene: MarkPhew_51 Start: 37053, Stop: 37217, Start Num: 28

Candidate Starts for MarkPhew_51:

(7, 36699), (23, 36966), (Start: 27 @37050 has 14 MA's), (Start: 28 @37053 has 43 MA's), (48, 37176), (53, 37203),

Gene: Marshawn_50 Start: 37185, Stop: 37352, Start Num: 27

Candidate Starts for Marshawn_50:

(16, 36966), (17, 36972), (18, 37014), (Start: 27 @37185 has 14 MA's), (Start: 28 @37188 has 43 MA's), (45, 37305), (52, 37338),

Gene: McMater_50 Start: 37097, Stop: 37273, Start Num: 28

Candidate Starts for McMater_50:

(4, 36695), (6, 36701), (15, 36875), (Start: 28 @37097 has 43 MA's), (37, 37184), (45, 37208), (55, 37259),

Gene: Mdavu_44 Start: 35841, Stop: 36017, Start Num: 28

Candidate Starts for Mdavu_44:

(2, 35370), (12, 35547), (14, 35607), (Start: 28 @35841 has 43 MA's), (37, 35928), (42, 35943), (44, 35949), (55, 36003),

Gene: MeaningOfLife_48 Start: 37119, Stop: 37286, Start Num: 29

Candidate Starts for MeaningOfLife_48:

(Start: 29 @37119 has 89 MA's), (44, 37221),

Gene: Megsy_49 Start: 36454, Stop: 36621, Start Num: 29

Candidate Starts for Megsy_49:

(Start: 29 @36454 has 89 MA's), (37, 36535), (44, 36556),

Gene: MissDaisy_50 Start: 36510, Stop: 36668, Start Num: 28

Candidate Starts for MissDaisy_50:

(Start: 28 @36510 has 43 MA's), (35, 36600), (38, 36612), (41, 36621), (45, 36633),

Gene: Mitti_51 Start: 36996, Stop: 37178, Start Num: 24

Candidate Starts for Mitti_51:

(Start: 24 @36996 has 19 MA's), (38, 37122), (45, 37143), (50, 37167),

Gene: Murucutumbu_48 Start: 37165, Stop: 37332, Start Num: 29

Candidate Starts for Murucutumbu_48:

(Start: 29 @37165 has 89 MA's), (32, 37198), (37, 37246), (44, 37267),

Gene: Mynx_48 Start: 36511, Stop: 36678, Start Num: 29

Candidate Starts for Mynx_48:

(Start: 29 @36511 has 89 MA's), (37, 36592), (44, 36613), (50, 36640),

Gene: Nibb_50 Start: 36742, Stop: 36906, Start Num: 28

Candidate Starts for Nibb_50:

(9, 36409), (23, 36655), (Start: 27 @36739 has 14 MA's), (Start: 28 @36742 has 43 MA's), (53, 36892),

Gene: Nikao_46 Start: 38465, Stop: 38641, Start Num: 28

Candidate Starts for Nikao_46:

(2, 37994), (12, 38171), (14, 38231), (Start: 28 @38465 has 43 MA's), (37, 38552), (42, 38567), (44, 38573), (55, 38627),

Gene: Niklas_50 Start: 37158, Stop: 37334, Start Num: 28

Candidate Starts for Niklas_50:

(Start: 28 @37158 has 43 MA's), (37, 37245), (45, 37269), (55, 37320),

Gene: November_48 Start: 36995, Stop: 37159, Start Num: 28

Candidate Starts for November_48:

(11, 36683), (15, 36764), (23, 36908), (Start: 27 @36992 has 14 MA's), (Start: 28 @36995 has 43 MA's), (45, 37106), (53, 37145),

Gene: Nutello_43 Start: 35852, Stop: 36028, Start Num: 28

Candidate Starts for Nutello_43:

(2, 35381), (12, 35558), (14, 35618), (Start: 28 @35852 has 43 MA's), (37, 35939), (42, 35954), (44, 35960), (55, 36014),

Gene: OmniCritical_50 Start: 36805, Stop: 36987, Start Num: 24

Candidate Starts for OmniCritical_50:

(Start: 24 @36805 has 19 MA's), (38, 36931), (45, 36952), (50, 36976),

Gene: Oscar_52 Start: 37487, Stop: 37651, Start Num: 27

Candidate Starts for Oscar_52:

(9, 37157), (23, 37403), (Start: 27 @37487 has 14 MA's), (39, 37580), (53, 37637),

Gene: Padfoot_47 Start: 36507, Stop: 36674, Start Num: 29

Candidate Starts for Padfoot_47:

(Start: 29 @36507 has 89 MA's), (37, 36588), (44, 36609),

Gene: Padpat_49 Start: 36186, Stop: 36353, Start Num: 29

Candidate Starts for Padpat_49:

(Start: 29 @36186 has 89 MA's), (37, 36267), (44, 36288),

Gene: Patt_49 Start: 36234, Stop: 36392, Start Num: 28

Candidate Starts for Patt_49:

(Start: 28 @36234 has 43 MA's), (35, 36324), (38, 36336), (41, 36345), (45, 36357),

Gene: Peanam_50 Start: 37116, Stop: 37292, Start Num: 28

Candidate Starts for Peanam_50:

(Start: 28 @37116 has 43 MA's), (37, 37203), (45, 37227), (55, 37278),

Gene: Peel_47 Start: 36312, Stop: 36479, Start Num: 29

Candidate Starts for Peel_47:

(Start: 29 @36312 has 89 MA's), (37, 36393), (44, 36414),

Gene: Pharb_48 Start: 35749, Stop: 35916, Start Num: 28

Candidate Starts for Pharb_48:

(Start: 28 @35749 has 43 MA's), (33, 35791), (44, 35866), (45, 35869), (52, 35902),

Gene: PhelpsODU_50 Start: 36191, Stop: 36358, Start Num: 27

Candidate Starts for PhelpsODU_50:

(11, 35876), (15, 35957), (Start: 27 @36191 has 14 MA's), (52, 36344), (53, 36350),

Gene: Phrank_51 Start: 36148, Stop: 36315, Start Num: 27

Candidate Starts for Phrank_51:

(11, 35833), (15, 35914), (Start: 27 @36148 has 14 MA's), (52, 36301), (53, 36307),

Gene: Piatt_47 Start: 36507, Stop: 36674, Start Num: 29

Candidate Starts for Piatt_47:

(Start: 29 @36507 has 89 MA's), (37, 36588), (44, 36609),

Gene: Pisa1_47 Start: 37463, Stop: 37630, Start Num: 29

Candidate Starts for Pisa1_47:
(Start: 29 @37463 has 89 MA's), (37, 37544), (44, 37565), (54, 37613),

Gene: Pisa4_41 Start: 32832, Stop: 32999, Start Num: 29
Candidate Starts for Pisa4_41:
(Start: 29 @32832 has 89 MA's), (37, 32913), (44, 32934), (54, 32982),

Gene: Pixie_50 Start: 36518, Stop: 36685, Start Num: 28
Candidate Starts for Pixie_50:
(11, 36197), (15, 36287), (22, 36428), (Start: 28 @36518 has 43 MA's), (31, 36539), (38, 36617), (44, 36635), (45, 36638), (52, 36671),

Gene: Pokerus_46 Start: 36233, Stop: 36400, Start Num: 29
Candidate Starts for Pokerus_46:
(Start: 29 @36233 has 89 MA's), (37, 36314), (44, 36335),

Gene: Prithvi_48 Start: 36395, Stop: 36562, Start Num: 29
Candidate Starts for Prithvi_48:
(Start: 29 @36395 has 89 MA's), (37, 36476), (44, 36497),

Gene: Qhanda_53 Start: 36917, Stop: 37099, Start Num: 24
Candidate Starts for Qhanda_53:
(Start: 24 @36917 has 19 MA's), (38, 37043), (45, 37064), (50, 37088),

Gene: QuincyRose_46 Start: 36625, Stop: 36792, Start Num: 29
Candidate Starts for QuincyRose_46:
(Start: 29 @36625 has 89 MA's), (37, 36706), (44, 36727),

Gene: Ramen_48 Start: 36197, Stop: 36364, Start Num: 29
Candidate Starts for Ramen_48:
(Start: 29 @36197 has 89 MA's), (37, 36278), (44, 36299),

Gene: Rapunzel97_48 Start: 36193, Stop: 36360, Start Num: 29
Candidate Starts for Rapunzel97_48:
(Start: 29 @36193 has 89 MA's), (37, 36274), (44, 36295),

Gene: Reptar3000_50 Start: 36222, Stop: 36380, Start Num: 28
Candidate Starts for Reptar3000_50:
(Start: 28 @36222 has 43 MA's), (38, 36324), (41, 36333), (45, 36345),

Gene: Richo_50 Start: 37097, Stop: 37273, Start Num: 28
Candidate Starts for Richo_50:
(4, 36695), (6, 36701), (15, 36875), (Start: 28 @37097 has 43 MA's), (37, 37184), (45, 37208), (55, 37259),

Gene: Rosmarinus_47 Start: 36298, Stop: 36465, Start Num: 29
Candidate Starts for Rosmarinus_47:
(Start: 29 @36298 has 89 MA's), (37, 36379), (44, 36400),

Gene: Ruthiejr_52 Start: 36870, Stop: 37052, Start Num: 24
Candidate Starts for Ruthiejr_52:
(Start: 24 @36870 has 19 MA's), (38, 36996), (45, 37017), (50, 37041),

Gene: SamScheppers_49 Start: 37299, Stop: 37481, Start Num: 24
Candidate Starts for SamScheppers_49:
(Start: 24 @37299 has 19 MA's), (38, 37425), (45, 37446), (50, 37470),

Gene: SamuelLPlaqson_48 Start: 37081, Stop: 37248, Start Num: 29
Candidate Starts for SamuelLPlaqson_48:
(Start: 29 @37081 has 89 MA's), (37, 37162), (44, 37183),

Gene: Scarlett_52 Start: 37479, Stop: 37643, Start Num: 27
Candidate Starts for Scarlett_52:
(23, 37395), (Start: 27 @37479 has 14 MA's), (39, 37572), (53, 37629),

Gene: SgtBeansprout_43 Start: 35852, Stop: 36028, Start Num: 28
Candidate Starts for SgtBeansprout_43:
(2, 35381), (12, 35558), (14, 35618), (Start: 28 @35852 has 43 MA's), (37, 35939), (42, 35954), (44, 35960), (55, 36014),

Gene: Shadow1_53 Start: 37312, Stop: 37476, Start Num: 28
Candidate Starts for Shadow1_53:
(11, 36994), (15, 37075), (Start: 27 @37309 has 14 MA's), (Start: 28 @37312 has 43 MA's), (34, 37390), (45, 37429), (51, 37456), (52, 37462), (53, 37468),

Gene: Shaobing_50 Start: 37134, Stop: 37310, Start Num: 28
Candidate Starts for Shaobing_50:
(Start: 28 @37134 has 43 MA's), (37, 37221), (45, 37245), (55, 37296),

Gene: ShedlockHolmes_51 Start: 37043, Stop: 37210, Start Num: 28
Candidate Starts for ShedlockHolmes_51:
(11, 36722), (15, 36812), (22, 36953), (Start: 28 @37043 has 43 MA's), (31, 37064), (44, 37160), (45, 37163), (52, 37196),

Gene: ShiaSurprise_48 Start: 36507, Stop: 36674, Start Num: 29
Candidate Starts for ShiaSurprise_48:
(Start: 29 @36507 has 89 MA's), (37, 36588), (44, 36609),

Gene: SirPhilip_50 Start: 37572, Stop: 37733, Start Num: 27
Candidate Starts for SirPhilip_50:
(5, 37182), (11, 37263), (23, 37488), (Start: 27 @37572 has 14 MA's), (Start: 28 @37575 has 43 MA's), (52, 37719),

Gene: Slarp_51 Start: 36908, Stop: 37090, Start Num: 24
Candidate Starts for Slarp_51:
(Start: 24 @36908 has 19 MA's), (38, 37034), (45, 37055), (50, 37079),

Gene: Slimphazie_47 Start: 36193, Stop: 36360, Start Num: 29
Candidate Starts for Slimphazie_47:
(Start: 29 @36193 has 89 MA's), (37, 36274), (44, 36295),

Gene: Spock_47 Start: 36311, Stop: 36478, Start Num: 29
Candidate Starts for Spock_47:
(Start: 29 @36311 has 89 MA's), (37, 36392), (44, 36413),

Gene: Stinson_48 Start: 36685, Stop: 36852, Start Num: 29

Candidate Starts for Stinson_48:
(Start: 29 @36685 has 89 MA's), (32, 36718), (37, 36766), (44, 36787),

Gene: Sulley_47 Start: 36437, Stop: 36604, Start Num: 29
Candidate Starts for Sulley_47:
(Start: 29 @36437 has 89 MA's), (44, 36539),

Gene: Sunflower1121_54 Start: 37413, Stop: 37577, Start Num: 28
Candidate Starts for Sunflower1121_54:
(11, 37095), (15, 37176), (Start: 27 @37410 has 14 MA's), (Start: 28 @37413 has 43 MA's), (34, 37491), (45, 37530), (51, 37557), (52, 37563), (53, 37569),

Gene: Syra333_53 Start: 37077, Stop: 37241, Start Num: 28
Candidate Starts for Syra333_53:
(11, 36759), (15, 36840), (Start: 27 @37074 has 14 MA's), (Start: 28 @37077 has 43 MA's), (45, 37194), (52, 37227), (53, 37233),

Gene: TClif_52 Start: 37471, Stop: 37641, Start Num: 27
Candidate Starts for TClif_52:
(1, 36745), (11, 37156), (15, 37237), (26, 37468), (Start: 27 @37471 has 14 MA's), (52, 37627),

Gene: Tachez_47 Start: 36155, Stop: 36322, Start Num: 29
Candidate Starts for Tachez_47:
(Start: 29 @36155 has 89 MA's), (37, 36236), (44, 36257),

Gene: TaiwanKao_49 Start: 36451, Stop: 36618, Start Num: 29
Candidate Starts for TaiwanKao_49:
(Start: 29 @36451 has 89 MA's), (37, 36532), (44, 36553),

Gene: Taquito_51 Start: 37155, Stop: 37337, Start Num: 24
Candidate Starts for Taquito_51:
(Start: 24 @37155 has 19 MA's), (38, 37281), (45, 37302), (50, 37326),

Gene: Teejan_45 Start: 38465, Stop: 38641, Start Num: 28
Candidate Starts for Teejan_45:
(2, 37994), (12, 38171), (14, 38231), (Start: 28 @38465 has 43 MA's), (37, 38552), (42, 38567), (44, 38573), (55, 38627),

Gene: Tierra_51 Start: 36959, Stop: 37126, Start Num: 27
Candidate Starts for Tierra_51:
(11, 36644), (15, 36725), (Start: 27 @36959 has 14 MA's), (52, 37112), (53, 37118),

Gene: Tigress9_53 Start: 37167, Stop: 37331, Start Num: 28
Candidate Starts for Tigress9_53:
(11, 36849), (15, 36930), (Start: 27 @37164 has 14 MA's), (Start: 28 @37167 has 43 MA's), (45, 37284), (52, 37317), (53, 37323),

Gene: TingHuaYa_48 Start: 35236, Stop: 35403, Start Num: 29
Candidate Starts for TingHuaYa_48:
(Start: 29 @35236 has 89 MA's), (37, 35317), (44, 35338),

Gene: TiniBug_48 Start: 37077, Stop: 37244, Start Num: 29
Candidate Starts for TiniBug_48:

(Start: 29 @37077 has 89 MA's), (37, 37158), (44, 37179),

Gene: Tiri_48 Start: 36485, Stop: 36652, Start Num: 29

Candidate Starts for Tiri_48:

(Start: 29 @36485 has 89 MA's), (37, 36566), (44, 36587),

Gene: Topper_47 Start: 36310, Stop: 36477, Start Num: 29

Candidate Starts for Topper_47:

(Start: 29 @36310 has 89 MA's), (37, 36391), (44, 36412),

Gene: Torres_46 Start: 38466, Stop: 38642, Start Num: 28

Candidate Starts for Torres_46:

(2, 37995), (12, 38172), (14, 38232), (Start: 28 @38466 has 43 MA's), (37, 38553), (42, 38568), (44, 38574), (55, 38628),

Gene: TreyKay_48 Start: 36395, Stop: 36562, Start Num: 29

Candidate Starts for TreyKay_48:

(Start: 29 @36395 has 89 MA's), (37, 36476), (44, 36497),

Gene: TribelTrouble_48 Start: 36399, Stop: 36566, Start Num: 28

Candidate Starts for TribelTrouble_48:

(11, 36087), (15, 36168), (Start: 28 @36399 has 43 MA's), (31, 36420), (33, 36441), (39, 36501), (44, 36516), (45, 36519), (52, 36552),

Gene: Trice_43 Start: 35853, Stop: 36029, Start Num: 28

Candidate Starts for Trice_43:

(2, 35382), (12, 35559), (14, 35619), (Start: 28 @35853 has 43 MA's), (37, 35940), (42, 35955), (44, 35961), (55, 36015),

Gene: TruffulaTree_47 Start: 36189, Stop: 36356, Start Num: 29

Candidate Starts for TruffulaTree_47:

(Start: 29 @36189 has 89 MA's), (37, 36270), (44, 36291),

Gene: Twitch_47 Start: 36312, Stop: 36479, Start Num: 29

Candidate Starts for Twitch_47:

(Start: 29 @36312 has 89 MA's), (37, 36393), (44, 36414),

Gene: Unicorn_50 Start: 36191, Stop: 36358, Start Num: 27

Candidate Starts for Unicorn_50:

(11, 35876), (15, 35957), (Start: 27 @36191 has 14 MA's), (52, 36344), (53, 36350),

Gene: Urkel_48 Start: 37081, Stop: 37248, Start Num: 29

Candidate Starts for Urkel_48:

(Start: 29 @37081 has 89 MA's), (37, 37162), (44, 37183),

Gene: Validus_52 Start: 37178, Stop: 37354, Start Num: 28

Candidate Starts for Validus_52:

(4, 36776), (6, 36782), (8, 36842), (15, 36956), (Start: 28 @37178 has 43 MA's), (37, 37265), (44, 37286), (45, 37289), (48, 37301), (55, 37340),

Gene: Veliki_48 Start: 36229, Stop: 36396, Start Num: 29

Candidate Starts for Veliki_48:

(Start: 29 @36229 has 89 MA's), (37, 36310), (44, 36331),

Gene: Wintermute_51 Start: 37057, Stop: 37239, Start Num: 24
Candidate Starts for Wintermute_51:
(Start: 24 @37057 has 19 MA's), (38, 37183), (45, 37204), (50, 37228),

Gene: Ximenita_54 Start: 37266, Stop: 37430, Start Num: 28
Candidate Starts for Ximenita_54:
(11, 36948), (15, 37029), (Start: 27 @37263 has 14 MA's), (Start: 28 @37266 has 43 MA's), (45, 37383), (52, 37416),

Gene: Y10_50 Start: 36976, Stop: 37158, Start Num: 24
Candidate Starts for Y10_50:
(Start: 24 @36976 has 19 MA's), (38, 37102), (40, 37108), (45, 37123), (50, 37147),

Gene: Y2_50 Start: 36976, Stop: 37158, Start Num: 24
Candidate Starts for Y2_50:
(Start: 24 @36976 has 19 MA's), (38, 37102), (40, 37108), (45, 37123), (50, 37147),

Gene: YasnayaPolyana_51 Start: 36907, Stop: 37089, Start Num: 24
Candidate Starts for YasnayaPolyana_51:
(Start: 24 @36907 has 19 MA's), (38, 37033), (45, 37054), (50, 37078),

Gene: YoureAdopted_46 Start: 36394, Stop: 36561, Start Num: 29
Candidate Starts for YoureAdopted_46:
(Start: 29 @36394 has 89 MA's), (36, 36469), (37, 36475), (44, 36496),

Gene: Yuna_54 Start: 38047, Stop: 38223, Start Num: 28
Candidate Starts for Yuna_54:
(11, 37735), (15, 37816), (23, 37960), (Start: 28 @38047 has 43 MA's), (35, 38125), (37, 38134), (44, 38155), (45, 38158), (55, 38209),

Gene: Yunkel11_50 Start: 35988, Stop: 36155, Start Num: 29
Candidate Starts for Yunkel11_50:
(Start: 29 @35988 has 89 MA's), (37, 36069), (44, 36090),

Gene: Zabiza_42 Start: 32500, Stop: 32667, Start Num: 29
Candidate Starts for Zabiza_42:
(Start: 29 @32500 has 89 MA's), (37, 32581), (44, 32602),

Gene: Zavala_49 Start: 36471, Stop: 36638, Start Num: 29
Candidate Starts for Zavala_49:
(Start: 29 @36471 has 89 MA's), (37, 36552), (44, 36573), (50, 36600),