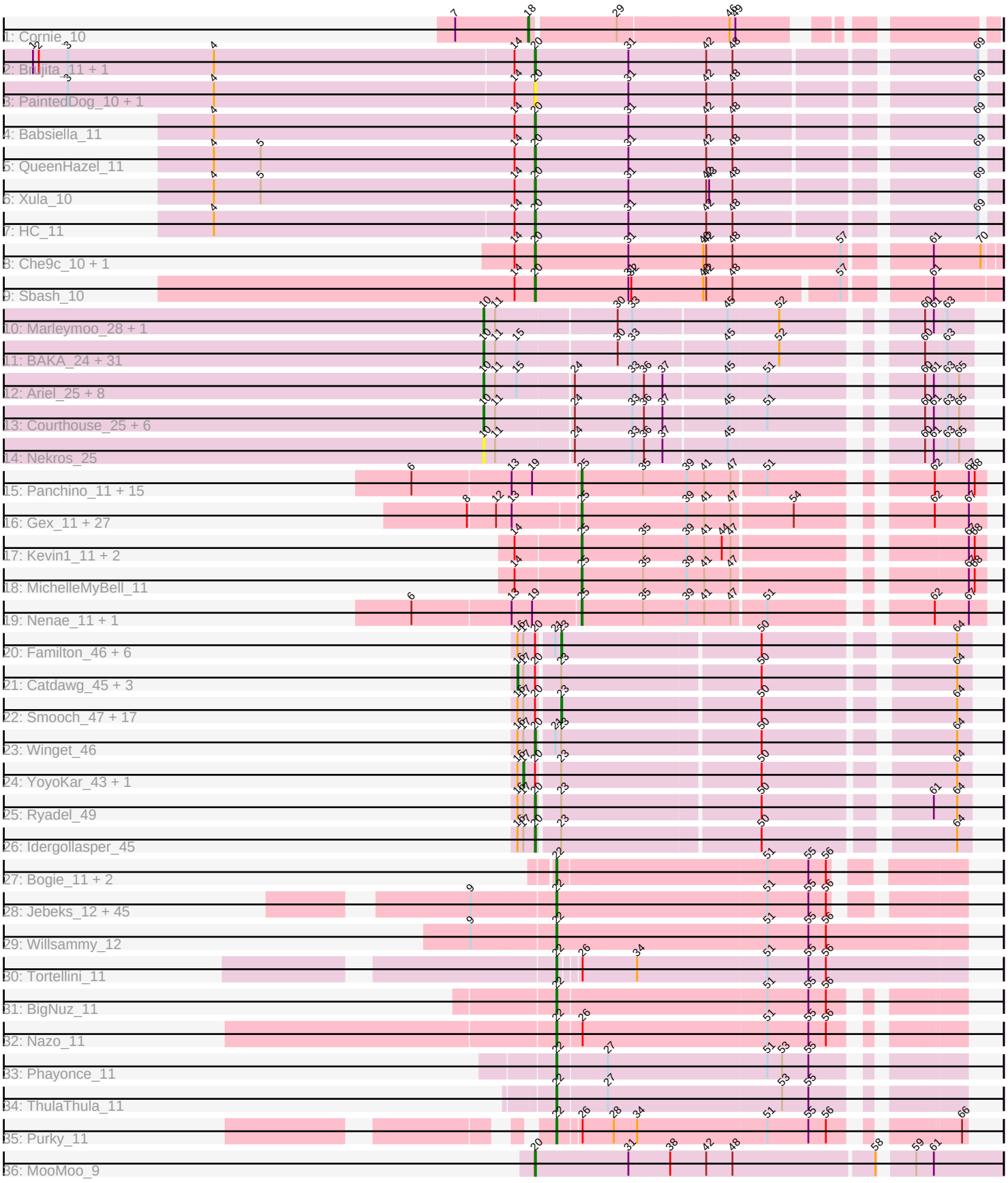
Pham 347270


1: Cornie_10
2: Brujita_11 + 1
3: PaintedDog_10 + 1
4: Babsiella_11
5: QueenHazel_11
6: Xula_10
7: HC_11
8: Che9c_10 + 1
9: Sbash_10
10: Marleymoo_28 + 1
11: BAKA_24 + 31
12: Ariel_25 + 8
13: Courthouse_25 + 6
14: Nekros_25
15: Panchino_11 + 15
16: Gex_11 + 27
17: Kevin1_11 + 2
18: MichelleMyBell_11
19: Nenae_11 + 1
20: Familton_46 + 6
21: Catdawg_45 + 3
22: Smooch_47 + 17
23: Winget_46
24: YoyoKar_43 + 1
25: Ryadel_49
26: Idergollasper_45
27: Bogie_11 + 2
28: Jebeks_12 + 45
29: Willsammy_12
30: Tortellini_11
31: BigNuz_11
32: Nazo_11
33: Phayonce_11
34: ThulaThula_11
35: Purky_11
36: MooMoo_9

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 347270 Report

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

Pham number 347270 has 204 members, 22 are drafts.

Phages represented in each track:
- Track 1 : Cornie_10
- Track 2 : Brujita_11, Island3_11
- Track 3 : PaintedDog_10, Bluvara_11
- Track 4 : Babsiella_11
- Track 5 : QueenHazel_11
- Track 6 : Xula_10
- Track 7 : HC_11
- Track 8 : Che9c_10, Stuck_10
- Track 9 : Sbash_10
- Track 10 : Marleymoo_28, Hidrated_26
- Track 11 : BAKA_24, Minerva_27, HokkenD_22, Yeet_25, EricMillard_27, Pound_27, Kalah2_28, Dallas_27, Constella_22, Odette_26, Bobby_28, Schatzie_25, Duke13_24, Optimus_25, Phoebus_27, Hughesyang_26, Halley_27, Klein_27, Bagrid_25, Redno2_26, Xiaokay_24, DmpstrDiver_26, JuicyJay_29, Zelink_28, Wanda_28, Thibault_23, Beem_27, NihilNomen_26, ThreeRngTarjay_26, Bombitas_24, Ejimix_28, Dove_25
- Track 12 : Ariel_25, BronnyJames_19, Porcelain_25, Superphikiman_25, KashFlow_19, LittleE_25, Shaboozey_19, MiaZeal_25, Rearden_22
- Track 13 : Courthouse_25, Gonephishing_23, Lucky2013_25, Omega_27, Hannaconda_22, Nibley_20, Squint_24
- Track 14 : Nekros_25
- Track 15 : Panchino_11, Hanako_11, PhancyPhin_11, Snekmaggedon_11, Impisi_11, Phrann_11, SkinnyPete_11, ShrimpFriedEgg_11, Shweta_11, Raymond7_11, Spinach_11, Jamie19_11, Rebel_11, BabeRuth_11, SpongeBob_11, Redi_11
- Track 16 : Gex_11, Journey_11, Andies_11, Smurph_11, Cubone_11, Silvafighter_11, Tapioca_11, Aggie_11, Xerxes_11, Bosection6_11, Chewbacca_11, Tortoise12_11, Philonius_11, Pipsqueaks_11, Carcharodon_11, Charlie_11, EGUnicorn_11, Fulbright_11, Duplicity_11, Xeno_11, Schnauzer_11, Silvy_11, Phloss_11, Melville_11, Magsby_11, Scitech_11, Parmesanjohn_11, Tessdabest_10
- Track 17 : Kevin1_11, Butters_11, Rubeelu_11
- Track 18 : MichelleMyBell_11
- Track 19 : Nenae_11, Purgamenstris_11
- Track 20 : Familton_46, Zebo_45, Blessica_46, JangDynasty_45, SchoolBus_45, TelAviv_42, Imara_45
- Track 21 : Catdawg_45, Corndog_47, Firecracker_45, Bora_42

• Track 22 : Smooch_47, Krili_44, YungJamal_48, Dylan_44, Wildflower_45, Mori_44, Vorrps_44, Alkhayr_45, NiebruSaylor_44, MadKillah_46, Shida_45, Wogge42_44, KingPhillip3_45, FoulBall_45, Ashwin_46, Vagabond_45, Murai_45, Schuy_46
• Track 23 : Winget_46
• Track 24 : YoyoKar_43, Zakhe101_45
• Track 25 : Ryadel_49
• Track 26 : Idergollasper_45
• Track 27 : Bogie_11, Shipwreck_11, Pygmy_11
• Track 28 : Jebeks_12, Etoile_12, Malithi_12, GaloreK_12, StressBall_12, KilKor_12, Chubbello_12, Langerak_12, GreaseLightnin_12, Phalm_12, Mangethe_12, Sonah_12, Kari_12, HUHilltop_12, Megiddo_12, Polkaroo_12, Fishburne_12, BronnyJr_12, Zilizebeth_12, Donovan_12, Necropolis_12, Ksquared_12, Techage_12, Camster_12, Bunnies_12, Bartholomew_12, Arib1_12, Bhagsy_12, Dynamo_12, Thespis_12, PeanutPie_12, Gavriela_12, Atcoo_12, CactusJack_12, Vidya_12, Glaske_12, Phegasus_12, Venti_12, Brusacoram_12, Xavia_12, FirstPlacePfu_12, Jung_12, Phineas_12, Majeke_12, StevieRay_12, Juniormint_12
• Track 29 : Willsammy_12
• Track 30 : Tortellini_11
• Track 31 : BigNuz_11
• Track 32 : Nazo_11
• Track 33 : Phayonce_11
• Track 34 : ThulaThula_11
• Track 35 : Purky_11
• Track 36 : MooMoo_9

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 51 of the 182 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arib1_12, Atcoo_12, Bartholomew_12, Bhagsy_12, BigNuz_11, Bogie_11, BronnyJr_12, Brusacoram_12, Bunnies_12, CactusJack_12, Camster_12, Chubbello_12, Donovan_12, Dynamo_12, Etoile_12, FirstPlacePfu_12, Fishburne_12, GaloreK_12, Gavriela_12, Glaske_12, GreaseLightnin_12, HUHilltop_12, Jebeks_12, Jung_12, Juniormint_12, Kari_12, KilKor_12, Ksquared_12, Langerak_12, Majeke_12, Malithi_12, Mangethe_12, Megiddo_12, Nazo_11, Necropolis_12, PeanutPie_12, Phalm_12, Phayonce_11, Phegasus_12, Phineas_12, Polkaroo_12, Purky_11, Pygmy_11, Shipwreck_11, Sonah_12, StevieRay_12, StressBall_12, Techage_12, Thespis_12, ThulaThula_11, Tortellini_11, Venti_12, Vidya_12, Willsammy_12, Xavia_12, Zilizebeth_12,

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

Genes that do not have the "Most Annotated" start:
• Aggie_11, Alkhayr_45, Andies_11, Ariel_25, Ashwin_46, BAKA_24, BabeRuth_11, Babsiella_11, Bagrid_25, Beem_27, Blessica_46, Bluvara_11, Bobby_28, Bombitas_24, Bora_42, Bosection6_11, BronnyJames_19, Brujita_11, Butters_11, Carcharodon_11, Catdawg_45, Charlie_11, Che9c_10, Chewbacca_11,

Constella_22, Corndog_47, Cornie_10, Courthouse_25, Cubone_11, Dallas_27, DmpstrDiver_26, Dove_25, Duke13_24, Duplicity_11, Dylan_44, EGUnicorn_11, Ejimix_28, EricMillard_27, Familton_46, Firecracker_45, FoulBall_45, Fulbright_11, Gex_11, Gonephishing_23, HC_11, Halley_27, Hanako_11, Hannaconda_22, Hidrated_26, HokkenD_22, Hughesyang_26, Idergollasper_45, Imara_45, Impisi_11, Island3_11, Jamie19_11, JangDynasty_45, Journey_11, JuicyJay_29, Kalah2_28, KashFlow_19, Kevin1_11, KingPhillip3_45, Klein_27, Krili_44, LittleE_25, Lucky2013_25, MadKillah_46, Magsby_11, Marleymoo_28, Melville_11, MiaZeal_25, MichelleMyBell_11, Minerva_27, MooMoo_9, Mori_44, Murai_45, Nekros_25, Nenae_11, Nibley_20, NiebruSaylor_44, NihilNomen_26, Odette_26, Omega_27, Optimus_25, PaintedDog_10, Panchino_11, Parmesanjohn_11, PhancyPhin_11, Philonius_11, Phloss_11, Phoebus_27, Phrann_11, Pipsqueaks_11, Porcelain_25, Pound_27, Purgamenstris_11, QueenHazel_11, Raymond7_11, Rearden_22, Rebel_11, Redi_11, Redno2_26, Rubeelu_11, Ryadel_49, Sbash_10, Schatzie_25, Schnauzer_11, SchoolBus_45, Schuy_46, Scitech_11, Shaboozey_19, Shida_45, ShrimpFriedEgg_11, Shweta_11, Silvafighter_11, Silvy_11, SkinnyPete_11, Smooch_47, Smurph_11, Snekmaggedon_11, Spinach_11, SpongeBob_11, Squint_24, Stuck_10, Superphikiman_25, Tapioca_11, TelAviv_42, Tessdabest_10, Thibault_23, ThreeRngTarjay_26, Tortoise12_11, Vagabond_45, Vorrps_44, Wanda_28, Wildflower_45, Winget_46, Wogge42_44, Xeno_11, Xerxes_11, Xiaokay_24, Xula_10, Yeet_25, YoyoKar_43, YungJamal_48, Zakhe101_45, Zebo_45, Zelink_28,

Summary by start number:

Start 10:
• Found in 51 of 204 (25.0%) of genes in pham
• Manual Annotations of this start: 41 of 182
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ariel_25 (J), BAKA_24 (J), Bagrid_25 (J), Beem_27 (J), Bobby_28 (J), Bombitas_24 (J), BronnyJames_19 (J), Constella_22 (J), Courthouse_25 (J), Dallas_27 (J), DmpstrDiver_26 (J), Dove_25 (J), Duke13_24 (J), Ejimix_28 (J), EricMillard_27 (J), Gonephishing_23 (J), Halley_27 (J), Hannaconda_22 (J), Hidrated_26 (J), HokkenD_22 (J), Hughesyang_26 (J), JuicyJay_29 (J), Kalah2_28 (J), KashFlow_19 (J), Klein_27 (J), LittleE_25 (J), Lucky2013_25 (J), Marleymoo_28 (J), MiaZeal_25 (J), Minerva_27 (J), Nekros_25 (J), Nibley_20 (J), NihilNomen_26 (J), Odette_26 (J), Omega_27 (J), Optimus_25 (J), Phoebus_27 (J), Porcelain_25 (J), Pound_27 (J), Rearden_22 (J), Redno2_26 (J), Schatzie_25 (J), Shaboozey_19 (J), Squint_24 (J), Superphikiman_25 (J), Thibault_23 (J), ThreeRngTarjay_26 (J), Wanda_28 (J), Xiaokay_24 (J), Yeet_25 (J), Zelink_28 (J),

Start 16:
• Found in 34 of 204 (16.7%) of genes in pham
• Manual Annotations of this start: 4 of 182
• Called 11.8% of time when present
• Phage (with cluster) where this start called: Bora_42 (O), Catdawg_45 (O), Corndog_47 (O), Firecracker_45 (O),

Start 17:
• Found in 34 of 204 (16.7%) of genes in pham
• Manual Annotations of this start: 1 of 182
• Called 5.9% of time when present

• Phage (with cluster) where this start called: YoyoKar_43 (O), Zakhe101_45 (O),

Start 18:
• Found in 1 of 204 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 182
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cornie_10 (F5),

Start 20:
• Found in 46 of 204 (22.5%) of genes in pham
• Manual Annotations of this start: 13 of 182
• Called 32.6% of time when present
• Phage (with cluster) where this start called: Babsiella_11 (I1), Bluvara_11 (I3), Brujita_11 (I1), Che9c_10 (I2), HC_11 (I1), Idergollasper_45 (O), Island3_11 (I1), MooMoo_9 (singleton), PaintedDog_10 (I1), QueenHazel_11 (I1), Ryadel_49 (O), Sbash_10 (I2), Stuck_10 (I2), Winget_46 (O), Xula_10 (I1),

Start 22:
• Found in 56 of 204 (27.5%) of genes in pham
• Manual Annotations of this start: 51 of 182
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arib1_12 (P1), Atcoo_12 (P1), Bartholomew_12 (P1), Bhagsy_12 (P1), BigNuz_11 (P4), Bogie_11 (P1), BronnyJr_12 (P1), Brusacoram_12 (P1), Bunnies_12 (P1), CactusJack_12 (P1), Camster_12 (P1), Chubbello_12 (P1), Donovan_12 (P1), Dynamo_12 (P1), Etoile_12 (P1), FirstPlacePfu_12 (P1), Fishburne_12 (P1), GaloreK_12 (P1), Gavriela_12 (P1), Glaske_12 (P1), GreaseLightnin_12 (P1), HUHilltop_12 (P1), Jebeks_12 (P1), Jung_12 (P1), Juniormint_12 (P1), Kari_12 (P1), KilKor_12 (P1), Ksquared_12 (P1), Langerak_12 (P1), Majeke_12 (P1), Malithi_12 (P1), Mangethe_12 (P1), Megiddo_12 (P1), Nazo_11 (P4), Necropolis_12 (P1), PeanutPie_12 (P1), Phalm_12 (P1), Phayonce_11 (P5), Phegasus_12 (P1), Phineas_12 (P1), Polkaroo_12 (P1), Purky_11 (P6), Pygmy_11 (P1), Shipwreck_11 (P1), Sonah_12 (P1), StevieRay_12 (P1), StressBall_12 (P1), Techage_12 (P1), Thespis_12 (P1), ThulaThula_11 (P5), Tortellini_11 (P2), Venti_12 (P1), Vidya_12 (P1), Willsammy_12 (P1), Xavia_12 (P3), Zilizebeth_12 (P1),

Start 23:
• Found in 34 of 204 (16.7%) of genes in pham
• Manual Annotations of this start: 24 of 182
• Called 73.5% of time when present
• Phage (with cluster) where this start called: Alkhayr_45 (O), Ashwin_46 (O), Blessica_46 (O), Dylan_44 (O), Familton_46 (O), FoulBall_45 (O), Imara_45 (O), JangDynasty_45 (O), KingPhillip3_45 (O), Krili_44 (O), MadKillah_46 (O), Mori_44 (O), Murai_45 (O), NiebruSaylor_44 (O), SchoolBus_45 (O), Schuy_46 (O), Shida_45 (O), Smooch_47 (O), TelAviv_42 (O), Vagabond_45 (O), Vorrps_44 (O), Wildflower_45 (O), Wogge42_44 (O), YungJamal_48 (O), Zebo_45 (O),

Start 25:
• Found in 50 of 204 (24.5%) of genes in pham
• Manual Annotations of this start: 47 of 182
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aggie_11 (N), Andies_11 (N), BabeRuth_11 (N), Bosection6_11 (N), Butters_11 (N), Carcharodon_11 (N),

Charlie_11 (N), Chewbacca_11 (N), Cubone_11 (N), Duplicity_11 (N), EGUnicorn_11 (N), Fulbright_11 (N), Gex_11 (N), Hanako_11 (N), Impisi_11 (N), Jamie19_11 (N), Journey_11 (N), Kevin1_11 (N), Magsby_11 (N), Melville_11 (N), MichelleMyBell_11 (N), Nenae_11 (N), Panchino_11 (N), Parmesanjohn_11 (N), PhancyPhin_11 (N), Philonius_11 (N), Phloss_11 (N), Phrann_11 (N), Pipsqueaks_11 (N), Purgamenstris_11 (N), Raymond7_11 (N), Rebel_11 (N), Redi_11 (N), Rubeelu_11 (N), Schnauzer_11 (N), Scitech_11 (N), ShrimpFriedEgg_11 (N), Shweta_11 (N), Silvafighter_11 (N), Silvy_11 (N), SkinnyPete_11 (N), Smurph_11 (N), Snekmaggedon_11 (N), Spinach_11 (N), SpongeBob_11 (N), Tapioca_11 (N), Tessdabest_10 (N), Tortoise12_11 (N), Xeno_11 (N), Xerxes_11 (N),

Summary by clusters:

There are 14 clusters represented in this pham: P2, P3, singleton, P1, P6, F5, P4, P5, I1, I3, J, O, N, I2,

Info for manual annotations of cluster F5:
•Start number 18 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster I1:
•Start number 20 was manually annotated 6 times for cluster I1.

Info for manual annotations of cluster I2:
•Start number 20 was manually annotated 3 times for cluster I2.

Info for manual annotations of cluster J:
•Start number 10 was manually annotated 41 times for cluster J.

Info for manual annotations of cluster N:
•Start number 25 was manually annotated 47 times for cluster N.

Info for manual annotations of cluster O:
•Start number 16 was manually annotated 4 times for cluster O.
•Start number 17 was manually annotated 1 time for cluster O.
•Start number 20 was manually annotated 3 times for cluster O.
•Start number 23 was manually annotated 24 times for cluster O.

Info for manual annotations of cluster P1:
•Start number 22 was manually annotated 44 times for cluster P1.

Info for manual annotations of cluster P2:
•Start number 22 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:
•Start number 22 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:
•Start number 22 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:
•Start number 22 was manually annotated 2 times for cluster P5.

Info for manual annotations of cluster P6:
•Start number 22 was manually annotated 1 time for cluster P6.

Gene Information:

Gene: Aggie_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Aggie_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Alkhayr_45 Start: 22908, Stop: 23294, Start Num: 23
Candidate Starts for Alkhayr_45:
(Start: 16 @22869 has 4 MA's), (Start: 17 @22875 has 1 MA's), (Start: 20 @22887 has 13 MA's), (Start: 23 @22908 has 24 MA's), (50, 23106), (64, 23280),

Gene: Andies_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Andies_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Arib1_12 Start: 7913, Stop: 8290, Start Num: 22
Candidate Starts for Arib1_12:
(9, 7829), (Start: 22 @7913 has 51 MA's), (51, 8126), (55, 8168), (56, 8186),

Gene: Ariel_25 Start: 14438, Stop: 14887, Start Num: 10
Candidate Starts for Ariel_25:
(Start: 10 @14438 has 41 MA's), (11, 14450), (15, 14471), (24, 14525), (33, 14582), (36, 14594), (37, 14612), (45, 14675), (51, 14714), (60, 14840), (61, 14849), (63, 14861), (65, 14873),

Gene: Ashwin_46 Start: 22906, Stop: 23292, Start Num: 23
Candidate Starts for Ashwin_46:
(Start: 16 @22867 has 4 MA's), (Start: 17 @22873 has 1 MA's), (Start: 20 @22885 has 13 MA's), (Start: 23 @22906 has 24 MA's), (50, 23104), (64, 23278),

Gene: Atcoo_12 Start: 7900, Stop: 8313, Start Num: 22
Candidate Starts for Atcoo_12:
(9, 7816), (Start: 22 @7900 has 51 MA's), (51, 8113), (55, 8155), (56, 8173),

Gene: BAKA_24 Start: 16545, Stop: 16994, Start Num: 10
Candidate Starts for BAKA_24:
(Start: 10 @16545 has 41 MA's), (11, 16557), (15, 16578), (30, 16674), (33, 16689), (45, 16782), (52, 16833), (60, 16947), (63, 16968),

Gene: BabeRuth_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for BabeRuth_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Babsiella_11 Start: 7921, Stop: 8361, Start Num: 20
Candidate Starts for Babsiella_11:
(4, 7591), (14, 7900), (Start: 20 @7921 has 13 MA's), (31, 8017), (42, 8095), (48, 8122), (69, 8347),

Gene: Bagrid_25 Start: 16334, Stop: 16783, Start Num: 10
Candidate Starts for Bagrid_25:
(Start: 10 @16334 has 41 MA's), (11, 16346), (15, 16367), (30, 16463), (33, 16478), (45, 16571), (52, 16622), (60, 16736), (63, 16757),

Gene: Bartholomew_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for Bartholomew_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: Beem_27 Start: 16900, Stop: 17349, Start Num: 10
Candidate Starts for Beem_27:
(Start: 10 @16900 has 41 MA's), (11, 16912), (15, 16933), (30, 17029), (33, 17044), (45, 17137), (52, 17188), (60, 17302), (63, 17323),

Gene: Bhagsy_12 Start: 7903, Stop: 8316, Start Num: 22
Candidate Starts for Bhagsy_12:
(9, 7819), (Start: 22 @7903 has 51 MA's), (51, 8116), (55, 8158), (56, 8176),

Gene: BigNuz_11 Start: 7647, Stop: 8021, Start Num: 22
Candidate Starts for BigNuz_11:
(Start: 22 @7647 has 51 MA's), (51, 7857), (55, 7899), (56, 7917),

Gene: Blessica_46 Start: 23309, Stop: 23695, Start Num: 23
Candidate Starts for Blessica_46:
(Start: 16 @23270 has 4 MA's), (Start: 17 @23276 has 1 MA's), (Start: 20 @23288 has 13 MA's), (21, 23303), (Start: 23 @23309 has 24 MA's), (50, 23507), (64, 23681),

Gene: Bluvara_11 Start: 7919, Stop: 8359, Start Num: 20
Candidate Starts for Bluvara_11:
(3, 7442), (4, 7592), (14, 7898), (Start: 20 @7919 has 13 MA's), (31, 8015), (42, 8093), (48, 8120), (69, 8345),

Gene: Bobby_28 Start: 16853, Stop: 17302, Start Num: 10
Candidate Starts for Bobby_28:
(Start: 10 @16853 has 41 MA's), (11, 16865), (15, 16886), (30, 16982), (33, 16997), (45, 17090), (52, 17141), (60, 17255), (63, 17276),

Gene: Bogie_11 Start: 7652, Stop: 8026, Start Num: 22
Candidate Starts for Bogie_11:
(Start: 22 @7652 has 51 MA's), (51, 7862), (55, 7904), (56, 7922),

Gene: Bombitas_24 Start: 16210, Stop: 16659, Start Num: 10
Candidate Starts for Bombitas_24:
(Start: 10 @16210 has 41 MA's), (11, 16222), (15, 16243), (30, 16339), (33, 16354), (45, 16447), (52, 16498), (60, 16612), (63, 16633),

Gene: Bora_42 Start: 22320, Stop: 22745, Start Num: 16
Candidate Starts for Bora_42:
(Start: 16 @22320 has 4 MA's), (Start: 17 @22326 has 1 MA's), (Start: 20 @22338 has 13 MA's), (Start: 23 @22359 has 24 MA's), (50, 22557), (64, 22731),

Gene: Bosection6_11 Start: 6975, Stop: 7346, Start Num: 25

Candidate Starts for Bosection6_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: BronnyJames_19 Start: 13070, Stop: 13519, Start Num: 10
Candidate Starts for BronnyJames_19:
(Start: 10 @13070 has 41 MA's), (11, 13082), (15, 13103), (24, 13157), (33, 13214), (36, 13226), (37, 13244), (45, 13307), (51, 13346), (60, 13472), (61, 13481), (63, 13493), (65, 13505),

Gene: BronnyJr_12 Start: 7916, Stop: 8293, Start Num: 22
Candidate Starts for BronnyJr_12:
(9, 7832), (Start: 22 @7916 has 51 MA's), (51, 8129), (55, 8171), (56, 8189),

Gene: Brujita_11 Start: 7922, Stop: 8362, Start Num: 20
Candidate Starts for Brujita_11:
(1, 7409), (2, 7415), (3, 7445), (4, 7595), (14, 7901), (Start: 20 @7922 has 13 MA's), (31, 8018), (42, 8096), (48, 8123), (69, 8348),

Gene: Brusacoram_12 Start: 7899, Stop: 8312, Start Num: 22
Candidate Starts for Brusacoram_12:
(9, 7815), (Start: 22 @7899 has 51 MA's), (51, 8112), (55, 8154), (56, 8172),

Gene: Bunnies_12 Start: 7912, Stop: 8325, Start Num: 22
Candidate Starts for Bunnies_12:
(9, 7828), (Start: 22 @7912 has 51 MA's), (51, 8125), (55, 8167), (56, 8185),

Gene: Butters_11 Start: 6995, Stop: 7366, Start Num: 25
Candidate Starts for Butters_11:
(14, 6929), (Start: 25 @6995 has 47 MA's), (35, 7058), (39, 7103), (41, 7121), (44, 7139), (47, 7148), (67, 7349), (68, 7355),

Gene: CactusJack_12 Start: 7899, Stop: 8312, Start Num: 22
Candidate Starts for CactusJack_12:
(9, 7815), (Start: 22 @7899 has 51 MA's), (51, 8112), (55, 8154), (56, 8172),

Gene: Camster_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for Camster_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: Carcharodon_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Carcharodon_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Catdawg_45 Start: 22959, Stop: 23384, Start Num: 16
Candidate Starts for Catdawg_45:
(Start: 16 @22959 has 4 MA's), (Start: 17 @22965 has 1 MA's), (Start: 20 @22977 has 13 MA's), (Start: 23 @22998 has 24 MA's), (50, 23196), (64, 23370),

Gene: Charlie_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Charlie_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Che9c_10 Start: 7526, Stop: 7978, Start Num: 20
Candidate Starts for Che9c_10:
(14, 7505), (Start: 20 @7526 has 13 MA's), (31, 7622), (40, 7697), (42, 7700), (48, 7727), (57, 7838), (61, 7913), (70, 7961),

Gene: Chewbacca_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Chewbacca_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Chubbello_12 Start: 7931, Stop: 8308, Start Num: 22
Candidate Starts for Chubbello_12:
(9, 7847), (Start: 22 @7931 has 51 MA's), (51, 8144), (55, 8186), (56, 8204),

Gene: Constella_22 Start: 15723, Stop: 16172, Start Num: 10
Candidate Starts for Constella_22:
(Start: 10 @15723 has 41 MA's), (11, 15735), (15, 15756), (30, 15852), (33, 15867), (45, 15960), (52, 16011), (60, 16125), (63, 16146),

Gene: Corndog_47 Start: 23417, Stop: 23842, Start Num: 16
Candidate Starts for Corndog_47:
(Start: 16 @23417 has 4 MA's), (Start: 17 @23423 has 1 MA's), (Start: 20 @23435 has 13 MA's), (Start: 23 @23456 has 24 MA's), (50, 23654), (64, 23828),

Gene: Cornie_10 Start: 7003, Stop: 7410, Start Num: 18
Candidate Starts for Cornie_10:
(7, 6928), (Start: 18 @7003 has 1 MA's), (29, 7087), (46, 7198), (49, 7204),

Gene: Courthouse_25 Start: 14840, Stop: 15289, Start Num: 10
Candidate Starts for Courthouse_25:
(Start: 10 @14840 has 41 MA's), (11, 14852), (24, 14927), (33, 14984), (36, 14996), (37, 15014), (45, 15077), (51, 15116), (60, 15242), (61, 15251), (63, 15263), (65, 15275),

Gene: Cubone_11 Start: 6999, Stop: 7370, Start Num: 25
Candidate Starts for Cubone_11:
(8, 6891), (12, 6918), (13, 6933), (Start: 25 @6999 has 47 MA's), (39, 7107), (41, 7125), (47, 7152), (54, 7212), (62, 7320), (67, 7353),

Gene: Dallas_27 Start: 16440, Stop: 16889, Start Num: 10
Candidate Starts for Dallas_27:
(Start: 10 @16440 has 41 MA's), (11, 16452), (15, 16473), (30, 16569), (33, 16584), (45, 16677), (52, 16728), (60, 16842), (63, 16863),

Gene: DmpstrDiver_26 Start: 17076, Stop: 17525, Start Num: 10
Candidate Starts for DmpstrDiver_26:
(Start: 10 @17076 has 41 MA's), (11, 17088), (15, 17109), (30, 17205), (33, 17220), (45, 17313), (52, 17364), (60, 17478), (63, 17499),

Gene: Donovan_12 Start: 7914, Stop: 8291, Start Num: 22
Candidate Starts for Donovan_12:
(9, 7830), (Start: 22 @7914 has 51 MA's), (51, 8127), (55, 8169), (56, 8187),

Gene: Dove_25 Start: 16209, Stop: 16658, Start Num: 10
Candidate Starts for Dove_25:
(Start: 10 @16209 has 41 MA's), (11, 16221), (15, 16242), (30, 16338), (33, 16353), (45, 16446), (52, 16497), (60, 16611), (63, 16632),

Gene: Duke13_24 Start: 16474, Stop: 16923, Start Num: 10
Candidate Starts for Duke13_24:
(Start: 10 @16474 has 41 MA's), (11, 16486), (15, 16507), (30, 16603), (33, 16618), (45, 16711), (52, 16762), (60, 16876), (63, 16897),

Gene: Duplicity_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Duplicity_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Dylan_44 Start: 22711, Stop: 23097, Start Num: 23
Candidate Starts for Dylan_44:
(Start: 16 @22672 has 4 MA's), (Start: 17 @22678 has 1 MA's), (Start: 20 @22690 has 13 MA's), (Start: 23 @22711 has 24 MA's), (50, 22909), (64, 23083),

Gene: Dynamo_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for Dynamo_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: EGUnicorn_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for EGUnicorn_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Ejimix_28 Start: 17650, Stop: 18099, Start Num: 10
Candidate Starts for Ejimix_28:
(Start: 10 @17650 has 41 MA's), (11, 17662), (15, 17683), (30, 17779), (33, 17794), (45, 17887), (52, 17938), (60, 18052), (63, 18073),

Gene: EricMillard_27 Start: 17186, Stop: 17635, Start Num: 10
Candidate Starts for EricMillard_27:
(Start: 10 @17186 has 41 MA's), (11, 17198), (15, 17219), (30, 17315), (33, 17330), (45, 17423), (52, 17474), (60, 17588), (63, 17609),

Gene: Etoile_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for Etoile_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: Familton_46 Start: 23002, Stop: 23388, Start Num: 23
Candidate Starts for Familton_46:
(Start: 16 @22963 has 4 MA's), (Start: 17 @22969 has 1 MA's), (Start: 20 @22981 has 13 MA's), (21, 22996), (Start: 23 @23002 has 24 MA's), (50, 23200), (64, 23374),

Gene: Firecracker_45 Start: 22570, Stop: 22995, Start Num: 16
Candidate Starts for Firecracker_45:
(Start: 16 @22570 has 4 MA's), (Start: 17 @22576 has 1 MA's), (Start: 20 @22588 has 13 MA's), (Start: 23 @22609 has 24 MA's), (50, 22807), (64, 22981),

Gene: FirstPlacePfu_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for FirstPlacePfu_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: Fishburne_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for Fishburne_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: FoulBall_45 Start: 22996, Stop: 23382, Start Num: 23
Candidate Starts for FoulBall_45:
(Start: 16 @22957 has 4 MA's), (Start: 17 @22963 has 1 MA's), (Start: 20 @22975 has 13 MA's), (Start: 23 @22996 has 24 MA's), (50, 23194), (64, 23368),

Gene: Fulbright_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Fulbright_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: GaloreK_12 Start: 7920, Stop: 8297, Start Num: 22
Candidate Starts for GaloreK_12:
(9, 7836), (Start: 22 @7920 has 51 MA's), (51, 8133), (55, 8175), (56, 8193),

Gene: Gavriela_12 Start: 7899, Stop: 8312, Start Num: 22
Candidate Starts for Gavriela_12:
(9, 7815), (Start: 22 @7899 has 51 MA's), (51, 8112), (55, 8154), (56, 8172),

Gene: Gex_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Gex_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Glaske_12 Start: 7899, Stop: 8312, Start Num: 22
Candidate Starts for Glaske_12:
(9, 7815), (Start: 22 @7899 has 51 MA's), (51, 8112), (55, 8154), (56, 8172),

Gene: Gonephishing_23 Start: 15013, Stop: 15462, Start Num: 10
Candidate Starts for Gonephishing_23:
(Start: 10 @15013 has 41 MA's), (11, 15025), (24, 15100), (33, 15157), (36, 15169), (37, 15187), (45, 15250), (51, 15289), (60, 15415), (61, 15424), (63, 15436), (65, 15448),

Gene: GreaseLightnin_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for GreaseLightnin_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: HC_11 Start: 7921, Stop: 8361, Start Num: 20
Candidate Starts for HC_11:
(4, 7594), (14, 7900), (Start: 20 @7921 has 13 MA's), (31, 8017), (42, 8095), (48, 8122), (69, 8347),

Gene: HUHilltop_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for HUHilltop_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: Halley_27 Start: 16899, Stop: 17348, Start Num: 10

Candidate Starts for Halley_27:
(Start: 10 @16899 has 41 MA's), (11, 16911), (15, 16932), (30, 17028), (33, 17043), (45, 17136), (52, 17187), (60, 17301), (63, 17322),

Gene: Hanako_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Hanako_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Hannaconda_22 Start: 13520, Stop: 13969, Start Num: 10
Candidate Starts for Hannaconda_22:
(Start: 10 @13520 has 41 MA's), (11, 13532), (24, 13607), (33, 13664), (36, 13676), (37, 13694), (45, 13757), (51, 13796), (60, 13922), (61, 13931), (63, 13943), (65, 13955),

Gene: Hidrated_26 Start: 17015, Stop: 17464, Start Num: 10
Candidate Starts for Hidrated_26:
(Start: 10 @17015 has 41 MA's), (11, 17027), (30, 17144), (33, 17159), (45, 17252), (52, 17303), (60, 17417), (61, 17426), (63, 17438),

Gene: HokkenD_22 Start: 16469, Stop: 16918, Start Num: 10
Candidate Starts for HokkenD_22:
(Start: 10 @16469 has 41 MA's), (11, 16481), (15, 16502), (30, 16598), (33, 16613), (45, 16706), (52, 16757), (60, 16871), (63, 16892),

Gene: Hughesyang_26 Start: 17082, Stop: 17531, Start Num: 10
Candidate Starts for Hughesyang_26:
(Start: 10 @17082 has 41 MA's), (11, 17094), (15, 17115), (30, 17211), (33, 17226), (45, 17319), (52, 17370), (60, 17484), (63, 17505),

Gene: Idergollasper_45 Start: 22975, Stop: 23382, Start Num: 20
Candidate Starts for Idergollasper_45:
(Start: 16 @22957 has 4 MA's), (Start: 17 @22963 has 1 MA's), (Start: 20 @22975 has 13 MA's), (Start: 23 @22996 has 24 MA's), (50, 23194), (64, 23368),

Gene: Imara_45 Start: 22805, Stop: 23191, Start Num: 23
Candidate Starts for Imara_45:
(Start: 16 @22766 has 4 MA's), (Start: 17 @22772 has 1 MA's), (Start: 20 @22784 has 13 MA's), (21, 22799), (Start: 23 @22805 has 24 MA's), (50, 23003), (64, 23177),

Gene: Impisi_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Impisi_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Island3_11 Start: 7922, Stop: 8362, Start Num: 20
Candidate Starts for Island3_11:
(1, 7409), (2, 7415), (3, 7445), (4, 7595), (14, 7901), (Start: 20 @7922 has 13 MA's), (31, 8018), (42, 8096), (48, 8123), (69, 8348),

Gene: Jamie19_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Jamie19_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: JangDynasty_45 Start: 23091, Stop: 23477, Start Num: 23
Candidate Starts for JangDynasty_45:
(Start: 16 @23052 has 4 MA's), (Start: 17 @23058 has 1 MA's), (Start: 20 @23070 has 13 MA's), (21, 23085), (Start: 23 @23091 has 24 MA's), (50, 23289), (64, 23463),

Gene: Jebeks_12 Start: 7913, Stop: 8290, Start Num: 22
Candidate Starts for Jebeks_12:
(9, 7829), (Start: 22 @7913 has 51 MA's), (51, 8126), (55, 8168), (56, 8186),

Gene: Journey_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Journey_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: JuicyJay_29 Start: 17733, Stop: 18182, Start Num: 10
Candidate Starts for JuicyJay_29:
(Start: 10 @17733 has 41 MA's), (11, 17745), (15, 17766), (30, 17862), (33, 17877), (45, 17970), (52, 18021), (60, 18135), (63, 18156),

Gene: Jung_12 Start: 7923, Stop: 8336, Start Num: 22
Candidate Starts for Jung_12:
(9, 7839), (Start: 22 @7923 has 51 MA's), (51, 8136), (55, 8178), (56, 8196),

Gene: Juniormint_12 Start: 7916, Stop: 8329, Start Num: 22
Candidate Starts for Juniormint_12:
(9, 7832), (Start: 22 @7916 has 51 MA's), (51, 8129), (55, 8171), (56, 8189),

Gene: Kalah2_28 Start: 17501, Stop: 17950, Start Num: 10
Candidate Starts for Kalah2_28:
(Start: 10 @17501 has 41 MA's), (11, 17513), (15, 17534), (30, 17630), (33, 17645), (45, 17738), (52, 17789), (60, 17903), (63, 17924),

Gene: Kari_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for Kari_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: KashFlow_19 Start: 13086, Stop: 13535, Start Num: 10
Candidate Starts for KashFlow_19:
(Start: 10 @13086 has 41 MA's), (11, 13098), (15, 13119), (24, 13173), (33, 13230), (36, 13242), (37, 13260), (45, 13323), (51, 13362), (60, 13488), (61, 13497), (63, 13509), (65, 13521),

Gene: Kevin1_11 Start: 6995, Stop: 7366, Start Num: 25
Candidate Starts for Kevin1_11:
(14, 6929), (Start: 25 @6995 has 47 MA's), (35, 7058), (39, 7103), (41, 7121), (44, 7139), (47, 7148), (67, 7349), (68, 7355),

Gene: KilKor_12 Start: 7899, Stop: 8312, Start Num: 22
Candidate Starts for KilKor_12:
(9, 7815), (Start: 22 @7899 has 51 MA's), (51, 8112), (55, 8154), (56, 8172),

Gene: KingPhillip3_45 Start: 22996, Stop: 23382, Start Num: 23
Candidate Starts for KingPhillip3_45:

(Start: 16 @22957 has 4 MA's), (Start: 17 @22963 has 1 MA's), (Start: 20 @22975 has 13 MA's), (Start: 23 @22996 has 24 MA's), (50, 23194), (64, 23368),

Gene: Klein_27 Start: 16479, Stop: 16928, Start Num: 10
Candidate Starts for Klein_27:
(Start: 10 @16479 has 41 MA's), (11, 16491), (15, 16512), (30, 16608), (33, 16623), (45, 16716), (52, 16767), (60, 16881), (63, 16902),

Gene: Krili_44 Start: 22713, Stop: 23099, Start Num: 23
Candidate Starts for Krili_44:
(Start: 16 @22674 has 4 MA's), (Start: 17 @22680 has 1 MA's), (Start: 20 @22692 has 13 MA's), (Start: 23 @22713 has 24 MA's), (50, 22911), (64, 23085),

Gene: Ksquared_12 Start: 7912, Stop: 8325, Start Num: 22
Candidate Starts for Ksquared_12:
(9, 7828), (Start: 22 @7912 has 51 MA's), (51, 8125), (55, 8167), (56, 8185),

Gene: Langerak_12 Start: 7913, Stop: 8290, Start Num: 22
Candidate Starts for Langerak_12:
(9, 7829), (Start: 22 @7913 has 51 MA's), (51, 8126), (55, 8168), (56, 8186),

Gene: LittleE_25 Start: 16225, Stop: 16674, Start Num: 10
Candidate Starts for LittleE_25:
(Start: 10 @16225 has 41 MA's), (11, 16237), (15, 16258), (24, 16312), (33, 16369), (36, 16381), (37, 16399), (45, 16462), (51, 16501), (60, 16627), (61, 16636), (63, 16648), (65, 16660),

Gene: Lucky2013_25 Start: 14968, Stop: 15417, Start Num: 10
Candidate Starts for Lucky2013_25:
(Start: 10 @14968 has 41 MA's), (11, 14980), (24, 15055), (33, 15112), (36, 15124), (37, 15142), (45, 15205), (51, 15244), (60, 15370), (61, 15379), (63, 15391), (65, 15403),

Gene: MadKillah_46 Start: 22935, Stop: 23321, Start Num: 23
Candidate Starts for MadKillah_46:
(Start: 16 @22896 has 4 MA's), (Start: 17 @22902 has 1 MA's), (Start: 20 @22914 has 13 MA's), (Start: 23 @22935 has 24 MA's), (50, 23133), (64, 23307),

Gene: Magsby_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Magsby_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Majeke_12 Start: 7913, Stop: 8290, Start Num: 22
Candidate Starts for Majeke_12:
(9, 7829), (Start: 22 @7913 has 51 MA's), (51, 8126), (55, 8168), (56, 8186),

Gene: Malithi_12 Start: 7935, Stop: 8348, Start Num: 22
Candidate Starts for Malithi_12:
(9, 7851), (Start: 22 @7935 has 51 MA's), (51, 8148), (55, 8190), (56, 8208),

Gene: Mangethe_12 Start: 7913, Stop: 8290, Start Num: 22
Candidate Starts for Mangethe_12:
(9, 7829), (Start: 22 @7913 has 51 MA's), (51, 8126), (55, 8168), (56, 8186),

Gene: Marleymoo_28 Start: 17560, Stop: 18009, Start Num: 10
Candidate Starts for Marleymoo_28:
(Start: 10 @17560 has 41 MA's), (11, 17572), (30, 17689), (33, 17704), (45, 17797), (52, 17848), (60, 17962), (61, 17971), (63, 17983),

Gene: Megiddo_12 Start: 7899, Stop: 8312, Start Num: 22
Candidate Starts for Megiddo_12:
(9, 7815), (Start: 22 @7899 has 51 MA's), (51, 8112), (55, 8154), (56, 8172),

Gene: Melville_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Melville_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: MiaZeal_25 Start: 14659, Stop: 15108, Start Num: 10
Candidate Starts for MiaZeal_25:
(Start: 10 @14659 has 41 MA's), (11, 14671), (15, 14692), (24, 14746), (33, 14803), (36, 14815), (37, 14833), (45, 14896), (51, 14935), (60, 15061), (61, 15070), (63, 15082), (65, 15094),

Gene: MichelleMyBell_11 Start: 7015, Stop: 7386, Start Num: 25
Candidate Starts for MichelleMyBell_11:
(14, 6949), (Start: 25 @7015 has 47 MA's), (35, 7078), (39, 7123), (41, 7141), (47, 7168), (67, 7369), (68, 7375),

Gene: Minerva_27 Start: 16964, Stop: 17413, Start Num: 10
Candidate Starts for Minerva_27:
(Start: 10 @16964 has 41 MA's), (11, 16976), (15, 16997), (30, 17093), (33, 17108), (45, 17201), (52, 17252), (60, 17366), (63, 17387),

Gene: MooMoo_9 Start: 6202, Stop: 6660, Start Num: 20
Candidate Starts for MooMoo_9:
(Start: 20 @6202 has 13 MA's), (31, 6298), (38, 6340), (42, 6376), (48, 6403), (58, 6544), (59, 6571), (61, 6589),

Gene: Mori_44 Start: 22584, Stop: 22970, Start Num: 23
Candidate Starts for Mori_44:
(Start: 16 @22545 has 4 MA's), (Start: 17 @22551 has 1 MA's), (Start: 20 @22563 has 13 MA's), (Start: 23 @22584 has 24 MA's), (50, 22782), (64, 22956),

Gene: Murai_45 Start: 22774, Stop: 23160, Start Num: 23
Candidate Starts for Murai_45:
(Start: 16 @22735 has 4 MA's), (Start: 17 @22741 has 1 MA's), (Start: 20 @22753 has 13 MA's), (Start: 23 @22774 has 24 MA's), (50, 22972), (64, 23146),

Gene: Nazo_11 Start: 7647, Stop: 8021, Start Num: 22
Candidate Starts for Nazo_11:
(Start: 22 @7647 has 51 MA's), (26, 7671), (51, 7857), (55, 7899), (56, 7917),

Gene: Necropolis_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for Necropolis_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: Nekros_25 Start: 16905, Stop: 17354, Start Num: 10

Candidate Starts for Nekros_25:
(Start: 10 @16905 has 41 MA's), (11, 16917), (24, 16992), (33, 17049), (36, 17061), (37, 17079), (45, 17142), (60, 17307), (61, 17316), (63, 17328), (65, 17340),

Gene: Nenae_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Nenae_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374),

Gene: Nibley_20 Start: 13587, Stop: 14036, Start Num: 10
Candidate Starts for Nibley_20:
(Start: 10 @13587 has 41 MA's), (11, 13599), (24, 13674), (33, 13731), (36, 13743), (37, 13761), (45, 13824), (51, 13863), (60, 13989), (61, 13998), (63, 14010), (65, 14022),

Gene: NiebruSaylor_44 Start: 22585, Stop: 22971, Start Num: 23
Candidate Starts for NiebruSaylor_44:
(Start: 16 @22546 has 4 MA's), (Start: 17 @22552 has 1 MA's), (Start: 20 @22564 has 13 MA's), (Start: 23 @22585 has 24 MA's), (50, 22783), (64, 22957),

Gene: NihilNomen_26 Start: 16961, Stop: 17410, Start Num: 10
Candidate Starts for NihilNomen_26:
(Start: 10 @16961 has 41 MA's), (11, 16973), (15, 16994), (30, 17090), (33, 17105), (45, 17198), (52, 17249), (60, 17363), (63, 17384),

Gene: Odette_26 Start: 16442, Stop: 16891, Start Num: 10
Candidate Starts for Odette_26:
(Start: 10 @16442 has 41 MA's), (11, 16454), (15, 16475), (30, 16571), (33, 16586), (45, 16679), (52, 16730), (60, 16844), (63, 16865),

Gene: Omega_27 Start: 18585, Stop: 19034, Start Num: 10
Candidate Starts for Omega_27:
(Start: 10 @18585 has 41 MA's), (11, 18597), (24, 18672), (33, 18729), (36, 18741), (37, 18759), (45, 18822), (51, 18861), (60, 18987), (61, 18996), (63, 19008), (65, 19020),

Gene: Optimus_25 Start: 16539, Stop: 16988, Start Num: 10
Candidate Starts for Optimus_25:
(Start: 10 @16539 has 41 MA's), (11, 16551), (15, 16572), (30, 16668), (33, 16683), (45, 16776), (52, 16827), (60, 16941), (63, 16962),

Gene: PaintedDog_10 Start: 7468, Stop: 7908, Start Num: 20
Candidate Starts for PaintedDog_10:
(3, 6991), (4, 7141), (14, 7447), (Start: 20 @7468 has 13 MA's), (31, 7564), (42, 7642), (48, 7669), (69, 7894),

Gene: Panchino_11 Start: 6996, Stop: 7367, Start Num: 25
Candidate Starts for Panchino_11:
(6, 6828), (13, 6927), (19, 6948), (Start: 25 @6996 has 47 MA's), (35, 7059), (39, 7104), (41, 7122), (47, 7149), (51, 7182), (62, 7317), (67, 7350), (68, 7356),

Gene: Parmesanjohn_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Parmesanjohn_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: PeanutPie_12 Start: 7903, Stop: 8316, Start Num: 22
Candidate Starts for PeanutPie_12:
(9, 7819), (Start: 22 @7903 has 51 MA's), (51, 8116), (55, 8158), (56, 8176),

Gene: Phalm_12 Start: 7899, Stop: 8312, Start Num: 22
Candidate Starts for Phalm_12:
(9, 7815), (Start: 22 @7899 has 51 MA's), (51, 8112), (55, 8154), (56, 8172),

Gene: PhancyPhin_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for PhancyPhin_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Phayonce_11 Start: 7601, Stop: 7975, Start Num: 22
Candidate Starts for Phayonce_11:
(Start: 22 @7601 has 51 MA's), (27, 7649), (51, 7811), (53, 7826), (55, 7853),

Gene: Phegasus_12 Start: 7913, Stop: 8290, Start Num: 22
Candidate Starts for Phegasus_12:
(9, 7829), (Start: 22 @7913 has 51 MA's), (51, 8126), (55, 8168), (56, 8186),

Gene: Philonius_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Philonius_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Phineas_12 Start: 7920, Stop: 8297, Start Num: 22
Candidate Starts for Phineas_12:
(9, 7836), (Start: 22 @7920 has 51 MA's), (51, 8133), (55, 8175), (56, 8193),

Gene: Phloss_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Phloss_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Phoebus_27 Start: 17186, Stop: 17635, Start Num: 10
Candidate Starts for Phoebus_27:
(Start: 10 @17186 has 41 MA's), (11, 17198), (15, 17219), (30, 17315), (33, 17330), (45, 17423), (52, 17474), (60, 17588), (63, 17609),

Gene: Phrann_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Phrann_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Pipsqueaks_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Pipsqueaks_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Polkaroo_12 Start: 7912, Stop: 8325, Start Num: 22
Candidate Starts for Polkaroo_12:

(9, 7828), (Start: 22 @7912 has 51 MA's), (51, 8125), (55, 8167), (56, 8185),

Gene: Porcelain_25 Start: 14659, Stop: 15108, Start Num: 10
Candidate Starts for Porcelain_25:
(Start: 10 @14659 has 41 MA's), (11, 14671), (15, 14692), (24, 14746), (33, 14803), (36, 14815), (37, 14833), (45, 14896), (51, 14935), (60, 15061), (61, 15070), (63, 15082), (65, 15094),

Gene: Pound_27 Start: 17278, Stop: 17727, Start Num: 10
Candidate Starts for Pound_27:
(Start: 10 @17278 has 41 MA's), (11, 17290), (15, 17311), (30, 17407), (33, 17422), (45, 17515), (52, 17566), (60, 17680), (63, 17701),

Gene: Purgamenstris_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Purgamenstris_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374),

Gene: Purky_11 Start: 7613, Stop: 7984, Start Num: 22
Candidate Starts for Purky_11:
(Start: 22 @7613 has 51 MA's), (26, 7634), (28, 7664), (34, 7688), (51, 7820), (55, 7862), (56, 7880), (66, 7979),

Gene: Pygmy_11 Start: 7652, Stop: 8026, Start Num: 22
Candidate Starts for Pygmy_11:
(Start: 22 @7652 has 51 MA's), (51, 7862), (55, 7904), (56, 7922),

Gene: QueenHazel_11 Start: 7927, Stop: 8367, Start Num: 20
Candidate Starts for QueenHazel_11:
(4, 7597), (5, 7645), (14, 7906), (Start: 20 @7927 has 13 MA's), (31, 8023), (42, 8101), (48, 8128), (69, 8353),

Gene: Raymond7_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Raymond7_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Rearden_22 Start: 13644, Stop: 14093, Start Num: 10
Candidate Starts for Rearden_22:
(Start: 10 @13644 has 41 MA's), (11, 13656), (15, 13677), (24, 13731), (33, 13788), (36, 13800), (37, 13818), (45, 13881), (51, 13920), (60, 14046), (61, 14055), (63, 14067), (65, 14079),

Gene: Rebel_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Rebel_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Redi_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Redi_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Redno2_26 Start: 16670, Stop: 17119, Start Num: 10
Candidate Starts for Redno2_26:

(Start: 10 @16670 has 41 MA's), (11, 16682), (15, 16703), (30, 16799), (33, 16814), (45, 16907), (52, 16958), (60, 17072), (63, 17093),

Gene: Rubeelu_11 Start: 6995, Stop: 7366, Start Num: 25
Candidate Starts for Rubeelu_11:
(14, 6929), (Start: 25 @6995 has 47 MA's), (35, 7058), (39, 7103), (41, 7121), (44, 7139), (47, 7148), (67, 7349), (68, 7355),

Gene: Ryadel_49 Start: 24037, Stop: 24444, Start Num: 20
Candidate Starts for Ryadel_49:
(Start: 16 @24019 has 4 MA's), (Start: 17 @24025 has 1 MA's), (Start: 20 @24037 has 13 MA's), (Start: 23 @24058 has 24 MA's), (50, 24256), (61, 24406), (64, 24430),

Gene: Sbash_10 Start: 7504, Stop: 7950, Start Num: 20
Candidate Starts for Sbash_10:
(14, 7483), (Start: 20 @7504 has 13 MA's), (31, 7600), (32, 7603), (40, 7675), (42, 7678), (48, 7705), (57, 7807), (61, 7882),

Gene: Schatzie_25 Start: 16211, Stop: 16660, Start Num: 10
Candidate Starts for Schatzie_25:
(Start: 10 @16211 has 41 MA's), (11, 16223), (15, 16244), (30, 16340), (33, 16355), (45, 16448), (52, 16499), (60, 16613), (63, 16634),

Gene: Schnauzer_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Schnauzer_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: SchoolBus_45 Start: 22999, Stop: 23385, Start Num: 23
Candidate Starts for SchoolBus_45:
(Start: 16 @22960 has 4 MA's), (Start: 17 @22966 has 1 MA's), (Start: 20 @22978 has 13 MA's), (21, 22993), (Start: 23 @22999 has 24 MA's), (50, 23197), (64, 23371),

Gene: Schuy_46 Start: 22932, Stop: 23318, Start Num: 23
Candidate Starts for Schuy_46:
(Start: 16 @22893 has 4 MA's), (Start: 17 @22899 has 1 MA's), (Start: 20 @22911 has 13 MA's), (Start: 23 @22932 has 24 MA's), (50, 23130), (64, 23304),

Gene: Scitech_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Scitech_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Shaboozey_19 Start: 13070, Stop: 13519, Start Num: 10
Candidate Starts for Shaboozey_19:
(Start: 10 @13070 has 41 MA's), (11, 13082), (15, 13103), (24, 13157), (33, 13214), (36, 13226), (37, 13244), (45, 13307), (51, 13346), (60, 13472), (61, 13481), (63, 13493), (65, 13505),

Gene: Shida_45 Start: 22839, Stop: 23225, Start Num: 23
Candidate Starts for Shida_45:
(Start: 16 @22800 has 4 MA's), (Start: 17 @22806 has 1 MA's), (Start: 20 @22818 has 13 MA's), (Start: 23 @22839 has 24 MA's), (50, 23037), (64, 23211),

Gene: Shipwreck_11 Start: 7630, Stop: 8004, Start Num: 22
Candidate Starts for Shipwreck_11:
(Start: 22 @7630 has 51 MA's), (51, 7840), (55, 7882), (56, 7900),

Gene: ShrimpFriedEgg_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for ShrimpFriedEgg_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Shweta_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Shweta_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Silvafighter_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Silvafighter_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Silvy_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Silvy_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: SkinnyPete_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for SkinnyPete_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Smooch_47 Start: 24127, Stop: 24513, Start Num: 23
Candidate Starts for Smooch_47:
(Start: 16 @24088 has 4 MA's), (Start: 17 @24094 has 1 MA's), (Start: 20 @24106 has 13 MA's), (Start: 23 @24127 has 24 MA's), (50, 24325), (64, 24499),

Gene: Smurph_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Smurph_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Snekmaggedon_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Snekmaggedon_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Sonah_12 Start: 7915, Stop: 8292, Start Num: 22
Candidate Starts for Sonah_12:
(9, 7831), (Start: 22 @7915 has 51 MA's), (51, 8128), (55, 8170), (56, 8188),

Gene: Spinach_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for Spinach_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: SpongeBob_11 Start: 7020, Stop: 7391, Start Num: 25
Candidate Starts for SpongeBob_11:
(6, 6852), (13, 6951), (19, 6972), (Start: 25 @7020 has 47 MA's), (35, 7083), (39, 7128), (41, 7146), (47, 7173), (51, 7206), (62, 7341), (67, 7374), (68, 7380),

Gene: Squint_24 Start: 14786, Stop: 15235, Start Num: 10
Candidate Starts for Squint_24:
(Start: 10 @14786 has 41 MA's), (11, 14798), (24, 14873), (33, 14930), (36, 14942), (37, 14960), (45, 15023), (51, 15062), (60, 15188), (61, 15197), (63, 15209), (65, 15221),

Gene: StevieRay_12 Start: 7923, Stop: 8300, Start Num: 22
Candidate Starts for StevieRay_12:
(9, 7839), (Start: 22 @7923 has 51 MA's), (51, 8136), (55, 8178), (56, 8196),

Gene: StressBall_12 Start: 7899, Stop: 8312, Start Num: 22
Candidate Starts for StressBall_12:
(9, 7815), (Start: 22 @7899 has 51 MA's), (51, 8112), (55, 8154), (56, 8172),

Gene: Stuck_10 Start: 7516, Stop: 7968, Start Num: 20
Candidate Starts for Stuck_10:
(14, 7495), (Start: 20 @7516 has 13 MA's), (31, 7612), (40, 7687), (42, 7690), (48, 7717), (57, 7828), (61, 7903), (70, 7951),

Gene: Superphikiman_25 Start: 14840, Stop: 15289, Start Num: 10
Candidate Starts for Superphikiman_25:
(Start: 10 @14840 has 41 MA's), (11, 14852), (15, 14873), (24, 14927), (33, 14984), (36, 14996), (37, 15014), (45, 15077), (51, 15116), (60, 15242), (61, 15251), (63, 15263), (65, 15275),

Gene: Tapioca_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Tapioca_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Techage_12 Start: 7916, Stop: 8293, Start Num: 22
Candidate Starts for Techage_12:
(9, 7832), (Start: 22 @7916 has 51 MA's), (51, 8129), (55, 8171), (56, 8189),

Gene: TelAviv_42 Start: 22993, Stop: 23379, Start Num: 23
Candidate Starts for TelAviv_42:
(Start: 16 @22954 has 4 MA's), (Start: 17 @22960 has 1 MA's), (Start: 20 @22972 has 13 MA's), (21, 22987), (Start: 23 @22993 has 24 MA's), (50, 23191), (64, 23365),

Gene: Tessdabest_10 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Tessdabest_10:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Thespis_12 Start: 7899, Stop: 8312, Start Num: 22
Candidate Starts for Thespis_12:
(9, 7815), (Start: 22 @7899 has 51 MA's), (51, 8112), (55, 8154), (56, 8172),

Gene: Thibault_23 Start: 16470, Stop: 16919, Start Num: 10
Candidate Starts for Thibault_23:

(Start: 10 @16470 has 41 MA's), (11, 16482), (15, 16503), (30, 16599), (33, 16614), (45, 16707), (52, 16758), (60, 16872), (63, 16893),

Gene: ThreeRngTarjay_26 Start: 17036, Stop: 17485, Start Num: 10
Candidate Starts for ThreeRngTarjay_26:
(Start: 10 @17036 has 41 MA's), (11, 17048), (15, 17069), (30, 17165), (33, 17180), (45, 17273), (52, 17324), (60, 17438), (63, 17459),

Gene: ThulaThula_11 Start: 7607, Stop: 7981, Start Num: 22
Candidate Starts for ThulaThula_11:
(Start: 22 @7607 has 51 MA's), (27, 7655), (53, 7832), (55, 7859),

Gene: Tortellini_11 Start: 7594, Stop: 7998, Start Num: 22
Candidate Starts for Tortellini_11:
(Start: 22 @7594 has 51 MA's), (26, 7612), (34, 7666), (51, 7798), (55, 7840), (56, 7858),

Gene: Tortoise12_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Tortoise12_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Vagabond_45 Start: 22826, Stop: 23212, Start Num: 23
Candidate Starts for Vagabond_45:
(Start: 16 @22787 has 4 MA's), (Start: 17 @22793 has 1 MA's), (Start: 20 @22805 has 13 MA's), (Start: 23 @22826 has 24 MA's), (50, 23024), (64, 23198),

Gene: Venti_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for Venti_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: Vidya_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for Vidya_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),

Gene: Vorrps_44 Start: 22585, Stop: 22971, Start Num: 23
Candidate Starts for Vorrps_44:
(Start: 16 @22546 has 4 MA's), (Start: 17 @22552 has 1 MA's), (Start: 20 @22564 has 13 MA's), (Start: 23 @22585 has 24 MA's), (50, 22783), (64, 22957),

Gene: Wanda_28 Start: 16479, Stop: 16928, Start Num: 10
Candidate Starts for Wanda_28:
(Start: 10 @16479 has 41 MA's), (11, 16491), (15, 16512), (30, 16608), (33, 16623), (45, 16716), (52, 16767), (60, 16881), (63, 16902),

Gene: Wildflower_45 Start: 22571, Stop: 22957, Start Num: 23
Candidate Starts for Wildflower_45:
(Start: 16 @22532 has 4 MA's), (Start: 17 @22538 has 1 MA's), (Start: 20 @22550 has 13 MA's), (Start: 23 @22571 has 24 MA's), (50, 22769), (64, 22943),

Gene: Willsammy_12 Start: 7902, Stop: 8315, Start Num: 22
Candidate Starts for Willsammy_12:
(9, 7818), (Start: 22 @7902 has 51 MA's), (51, 8115), (55, 8157), (56, 8175),

Gene: Winget_46 Start: 23244, Stop: 23651, Start Num: 20
Candidate Starts for Winget_46:
(Start: 16 @23226 has 4 MA's), (Start: 17 @23232 has 1 MA's), (Start: 20 @23244 has 13 MA's), (21, 23259), (Start: 23 @23265 has 24 MA's), (50, 23463), (64, 23637),

Gene: Wogge42_44 Start: 22904, Stop: 23290, Start Num: 23
Candidate Starts for Wogge42_44:
(Start: 16 @22865 has 4 MA's), (Start: 17 @22871 has 1 MA's), (Start: 20 @22883 has 13 MA's), (Start: 23 @22904 has 24 MA's), (50, 23102), (64, 23276),

Gene: Xavia_12 Start: 7936, Stop: 8313, Start Num: 22
Candidate Starts for Xavia_12:
(9, 7852), (Start: 22 @7936 has 51 MA's), (51, 8149), (55, 8191), (56, 8209),

Gene: Xeno_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Xeno_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Xerxes_11 Start: 6975, Stop: 7346, Start Num: 25
Candidate Starts for Xerxes_11:
(8, 6867), (12, 6894), (13, 6909), (Start: 25 @6975 has 47 MA's), (39, 7083), (41, 7101), (47, 7128), (54, 7188), (62, 7296), (67, 7329),

Gene: Xiaokay_24 Start: 16486, Stop: 16935, Start Num: 10
Candidate Starts for Xiaokay_24:
(Start: 10 @16486 has 41 MA's), (11, 16498), (15, 16519), (30, 16615), (33, 16630), (45, 16723), (52, 16774), (60, 16888), (63, 16909),

Gene: Xula_10 Start: 7556, Stop: 7996, Start Num: 20
Candidate Starts for Xula_10:
(4, 7226), (5, 7274), (14, 7535), (Start: 20 @7556 has 13 MA's), (31, 7652), (42, 7730), (43, 7733), (48, 7757), (69, 7982),

Gene: Yeet_25 Start: 16212, Stop: 16661, Start Num: 10
Candidate Starts for Yeet_25:
(Start: 10 @16212 has 41 MA's), (11, 16224), (15, 16245), (30, 16341), (33, 16356), (45, 16449), (52, 16500), (60, 16614), (63, 16635),

Gene: YoyoKar_43 Start: 22516, Stop: 22935, Start Num: 17
Candidate Starts for YoyoKar_43:
(Start: 16 @22510 has 4 MA's), (Start: 17 @22516 has 1 MA's), (Start: 20 @22528 has 13 MA's), (Start: 23 @22549 has 24 MA's), (50, 22747), (64, 22921),

Gene: YungJamal_48 Start: 23304, Stop: 23690, Start Num: 23
Candidate Starts for YungJamal_48:
(Start: 16 @23265 has 4 MA's), (Start: 17 @23271 has 1 MA's), (Start: 20 @23283 has 13 MA's), (Start: 23 @23304 has 24 MA's), (50, 23502), (64, 23676),

Gene: Zakhe101_45 Start: 22682, Stop: 23101, Start Num: 17
Candidate Starts for Zakhe101_45:
(Start: 16 @22676 has 4 MA's), (Start: 17 @22682 has 1 MA's), (Start: 20 @22694 has 13 MA's), (Start: 23 @22715 has 24 MA's), (50, 22913), (64, 23087),

Gene: Zebo_45 Start: 22999, Stop: 23385, Start Num: 23
Candidate Starts for Zebo_45:
(Start: 16 @22960 has 4 MA's), (Start: 17 @22966 has 1 MA's), (Start: 20 @22978 has 13 MA's), (21, 22993), (Start: 23 @22999 has 24 MA's), (50, 23197), (64, 23371),

Gene: Zelink_28 Start: 17064, Stop: 17513, Start Num: 10
Candidate Starts for Zelink_28:
(Start: 10 @17064 has 41 MA's), (11, 17076), (15, 17097), (30, 17193), (33, 17208), (45, 17301), (52, 17352), (60, 17466), (63, 17487),

Gene: Zilizebeth_12 Start: 7932, Stop: 8309, Start Num: 22
Candidate Starts for Zilizebeth_12:
(9, 7848), (Start: 22 @7932 has 51 MA's), (51, 8145), (55, 8187), (56, 8205),