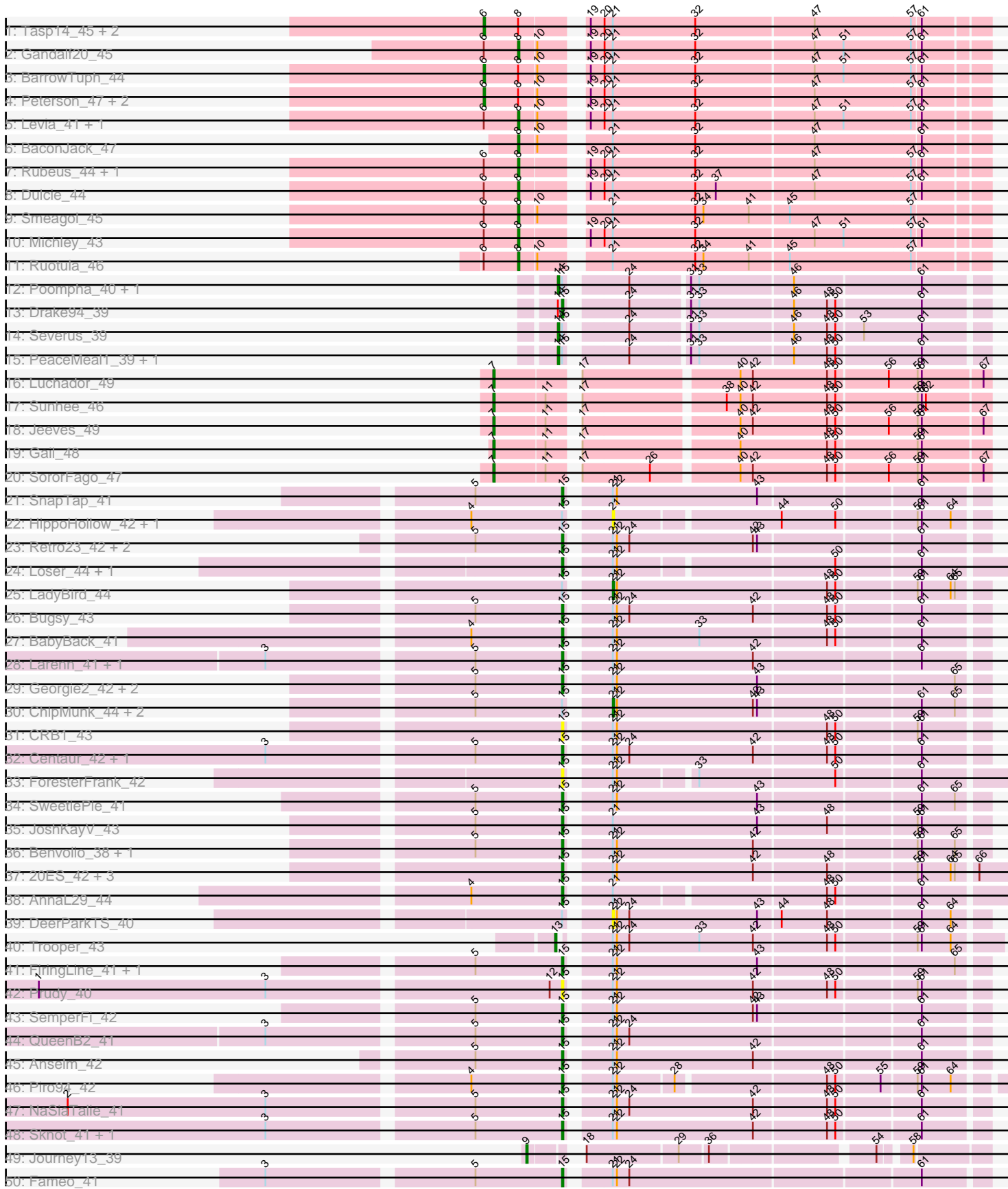


Pham 308422



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 308422 Report

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

Pham number 308422 has 90 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Tasp14_45, Gwendoluna_46, Parliament_43
- Track 2 : Gandalf20_45
- Track 3 : BarrowTuph_44
- Track 4 : Peterson_47, Jorgensen_44, Ichabod_45
- Track 5 : Levia_41, PhineBark_43
- Track 6 : BaconJack_47
- Track 7 : Rubeus_44, Lamina13_44
- Track 8 : Dulcie_44
- Track 9 : Smeagol_45
- Track 10 : Michley_43
- Track 11 : Ruotula_46
- Track 12 : Poompha_40, Trike_38
- Track 13 : Drake94_39
- Track 14 : Severus_39
- Track 15 : PeaceMeal1_39, KittenMittens_38
- Track 16 : Luchador_49
- Track 17 : Sunhee_46
- Track 18 : Jeeves_49
- Track 19 : Gail_48
- Track 20 : SororFago_47
- Track 21 : SnapTap_41
- Track 22 : HippoHollow_42, LionsBait_44
- Track 23 : Retro23_42, Dalmatian_42, DudeLittle_40
- Track 24 : Loser_44, RedRock_44
- Track 25 : LadyBird_44
- Track 26 : Buggy_43
- Track 27 : BabyBack_41
- Track 28 : Larenn_41, Malec_42
- Track 29 : Georgie2_42, Crucio_41, Power_40
- Track 30 : ChipMunk_44, KingCyrus_44, EvilGenius_44
- Track 31 : CRB1_43
- Track 32 : Centaur_42, Terrific_44
- Track 33 : ForesterFrank_42
- Track 34 : SweetiePie_41
- Track 35 : JoshKayV_43
- Track 36 : Benvolio_38, Echild_41
- Track 37 : 20ES_42, AN3_42, First_0041, Deloris_40

- Track 38 : AnnaL29_44
- Track 39 : DeerParkTS_40
- Track 40 : Trooper_43
- Track 41 : FiringLine_41, QueenBeesly_41
- Track 42 : Prudy_40
- Track 43 : SemperFi_42
- Track 44 : QueenB2_41
- Track 45 : Anselm_42
- Track 46 : Piro94_42
- Track 47 : NaSiaTalie_41
- Track 48 : Sknot_41, Flare16_41
- Track 49 : Journey13_39
- Track 50 : Fameo_41
- Track 51 : GaugeLDP_41
- Track 52 : BengiVuitton_41
- Track 53 : Changeling_43
- Track 54 : Kinmap_42
- Track 55 : Arissanae_42
- Track 56 : Charm_40
- Track 57 : BogosyJay_42, Maminiaina_42
- Track 58 : SheaKeira_41
- Track 59 : DreamTeam1_40
- Track 60 : Klodlith_41
- Track 61 : Vanisoa_42
- Track 62 : Yecey3_44
- Track 63 : Bipper_130
- Track 64 : Hilltopfarm_129, Faiyaz_127

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

The start number called the most often in the published annotations is 15, it was called in 38 of the 79 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 20ES_42, AN3_42, AnnaL29_44, Anselm_42, BabyBack_41, Benvolio_38, Bipper_130, Buggy_43, CRB1_43, Centaur_42, Changeling_43, Charm_40, Crucio_41, Dalmatian_42, Deloris_40, Drake94_39, DudeLittle_40, Echild_41, Faiyaz_127, Fameo_41, FiringLine_41, First_0041, Flare16_41, ForesterFrank_42, GaugeLDP_41, Georgie2_42, Hilltopfarm_129, JoshKayV_43, Larenn_41, Loser_44, Malec_42, NaSiaTalie_41, Piro94_42, Power_40, Prudy_40, QueenB2_41, QueenBeesly_41, RedRock_44, Retro23_42, SemperFi_42, Sknot_41, SnapTap_41, SweetiePie_41, Terrific_44,

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

- BengiVuitton_41, ChipMunk_44, DeerParkTS_40, EvilGenius_44, HippoHollow_42, KingCyrus_44, KittenMittens_38, LadyBird_44, LionsBait_44, PeaceMeal1_39, Poompha_40, Severus_39, Trike_38,

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

- Arissanae_42, BaconJack_47, BarrowTuph_44, BogosyJay_42, DreamTeam1_40, Dulcie_44, Gail_48, Gandalf20_45, Gwendoluna_46, Ichabod_45, Jeeves_49, Jorgensen_44, Journey13_39, Kinmap_42, Klodlith_41, Lamina13_44, Levia_41, Luchador_49, Maminaiaina_42, Michley_43, Parliament_43, Peterson_47, PhineBark_43, Rubeus_44, Ruotula_46, SheaKeira_41, Smeagol_45, SororFago_47, Sunhee_46, Tasp14_45, Trooper_43, Vanisoa_42, Yecey3_44,

Summary by start number:

Start 6:

- Found in 16 of 90 (17.8%) of genes in pham
- Manual Annotations of this start: 7 of 79
- Called 43.8% of time when present
- Phage (with cluster) where this start called: BarrowTuph_44 (A1), Gwendoluna_46 (A1), Ichabod_45 (A1), Jorgensen_44 (A1), Parliament_43 (A1), Peterson_47 (A1), Tasp14_45 (A1),

Start 7:

- Found in 5 of 90 (5.6%) of genes in pham
- Manual Annotations of this start: 5 of 79
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gail_48 (A14), Jeeves_49 (A14), Luchador_49 (A14), SororFago_47 (A14), Sunhee_46 (A14),

Start 8:

- Found in 17 of 90 (18.9%) of genes in pham
- Manual Annotations of this start: 10 of 79
- Called 58.8% of time when present
- Phage (with cluster) where this start called: BaconJack_47 (A1), Dulcie_44 (A1), Gandalf20_45 (A1), Lamina13_44 (A1), Levia_41 (A1), Michley_43 (A1), PhineBark_43 (A1), Rubeus_44 (A1), Ruotula_46 (A1), Smeagol_45 (A1),

Start 9:

- Found in 2 of 90 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 79
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Journey13_39 (A2), Kinmap_42 (A21),

Start 13:

- Found in 1 of 90 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 79
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trooper_43 (A2),

Start 14:

- Found in 14 of 90 (15.6%) of genes in pham
- Manual Annotations of this start: 12 of 79
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Arissanae_42 (A9), BogosyJay_42 (A9), DreamTeam1_40 (A9), KittenMittens_38 (A10), Klodlith_41 (A9), Maminaiaina_42 (A9), PeaceMeal1_39 (A10), Poompha_40 (A10), Severus_39 (A10), SheaKeira_41 (A9), Trike_38 (A10), Vanisoa_42 (A9), Yecey3_44 (A9),

Start 15:

- Found in 57 of 90 (63.3%) of genes in pham
- Manual Annotations of this start: 38 of 79
- Called 77.2% of time when present
- Phage (with cluster) where this start called: 20ES_42 (A2), AN3_42 (A2), AnnaL29_44 (A2), Anselm_42 (A2), BabyBack_41 (A2), Benvolio_38 (A2), Bipper_130 (Y), Buggy_43 (A2), CRB1_43 (A2), Centaur_42 (A2), Changeling_43 (A2), Charm_40 (A9), Crucio_41 (A2), Dalmatian_42 (A2), Deloris_40 (A2), Drake94_39 (A10), DudeLittle_40 (A2), Echild_41 (A2), Faiyaz_127 (Y), Fameo_41 (A2), FiringLine_41 (A2), First_0041 (A2), Flare16_41 (A2), ForesterFrank_42 (A2), GaugeLDP_41 (A2), Georgie2_42 (A2), Hilltopfarm_129 (Y), JoshKayV_43 (A2), Larenn_41 (A2), Loser_44 (A2), Malec_42 (A2), NaSiaTalie_41 (A2), Piro94_42 (A2), Power_40 (A2), Prudy_40 (A2), QueenB2_41 (A2), QueenBeesly_41 (A2), RedRock_44 (A2), Retro23_42 (A2), SemperFi_42 (A2), Sknot_41 (A2), SnapTap_41 (A2), SweetiePie_41 (A2), Terrific_44 (A2),

Start 21:

- Found in 72 of 90 (80.0%) of genes in pham
- Manual Annotations of this start: 5 of 79
- Called 11.1% of time when present
- Phage (with cluster) where this start called: BengiVuitton_41 (A2), ChipMunk_44 (A2), DeerParkTS_40 (A2), EvilGenius_44 (A2), HippoHollow_42 (A2), KingCyrus_44 (A2), LadyBird_44 (A2), LionsBait_44 (A2),

Summary by clusters:

There are 7 clusters represented in this pham: A21, A10, A14, A1, Y, A2, A9,

Info for manual annotations of cluster A1:

- Start number 6 was manually annotated 7 times for cluster A1.
- Start number 8 was manually annotated 10 times for cluster A1.

Info for manual annotations of cluster A10:

- Start number 14 was manually annotated 5 times for cluster A10.
- Start number 15 was manually annotated 1 time for cluster A10.

Info for manual annotations of cluster A14:

- Start number 7 was manually annotated 5 times for cluster A14.

Info for manual annotations of cluster A2:

- Start number 9 was manually annotated 1 time for cluster A2.
- Start number 13 was manually annotated 1 time for cluster A2.
- Start number 15 was manually annotated 33 times for cluster A2.
- Start number 21 was manually annotated 5 times for cluster A2.

Info for manual annotations of cluster A9:

- Start number 14 was manually annotated 7 times for cluster A9.
- Start number 15 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster Y:

- Start number 15 was manually annotated 3 times for cluster Y.

Gene Information:

Gene: 20ES_42 Start: 28994, Stop: 28695, Start Num: 15

Candidate Starts for 20ES_42:

(Start: 15 @28994 has 38 MA's), (Start: 21 @28970 has 5 MA's), (22, 28967), (42, 28868), (48, 28817), (59, 28757), (61, 28754), (64, 28733), (65, 28730), (66, 28718),

Gene: AN3_42 Start: 29377, Stop: 29078, Start Num: 15

Candidate Starts for AN3_42:

(Start: 15 @29377 has 38 MA's), (Start: 21 @29353 has 5 MA's), (22, 29350), (42, 29251), (48, 29200), (59, 29140), (61, 29137), (64, 29116), (65, 29113), (66, 29101),

Gene: AnnaL29_44 Start: 30276, Stop: 29986, Start Num: 15

Candidate Starts for AnnaL29_44:

(4, 30342), (Start: 15 @30276 has 38 MA's), (Start: 21 @30252 has 5 MA's), (48, 30108), (50, 30102), (61, 30045),

Gene: Anselm_42 Start: 29438, Stop: 29154, Start Num: 15

Candidate Starts for Anselm_42:

(5, 29501), (Start: 15 @29438 has 38 MA's), (Start: 21 @29414 has 5 MA's), (22, 29411), (42, 29312), (61, 29198),

Gene: Arissanae_42 Start: 29990, Stop: 29694, Start Num: 14

Candidate Starts for Arissanae_42:

(Start: 14 @29990 has 12 MA's), (Start: 21 @29954 has 5 MA's), (24, 29942), (30, 29903), (39, 29876), (40, 29867), (42, 29858), (44, 29837), (59, 29756), (61, 29753),

Gene: BabyBack_41 Start: 29807, Stop: 29523, Start Num: 15

Candidate Starts for BabyBack_41:

(4, 29873), (Start: 15 @29807 has 38 MA's), (Start: 21 @29783 has 5 MA's), (22, 29780), (33, 29720), (48, 29630), (50, 29624), (61, 29567),

Gene: BaconJack_47 Start: 33764, Stop: 33450, Start Num: 8

Candidate Starts for BaconJack_47:

(Start: 8 @33764 has 10 MA's), (10, 33752), (Start: 21 @33713 has 5 MA's), (32, 33653), (47, 33569), (61, 33494),

Gene: BarrowTuph_44 Start: 32992, Stop: 32654, Start Num: 6

Candidate Starts for BarrowTuph_44:

(Start: 6 @32992 has 7 MA's), (Start: 8 @32968 has 10 MA's), (10, 32956), (19, 32932), (20, 32923), (Start: 21 @32917 has 5 MA's), (32, 32857), (47, 32773), (51, 32752), (57, 32704), (61, 32698),

Gene: BengiVuitton_41 Start: 28935, Stop: 28660, Start Num: 21

Candidate Starts for BengiVuitton_41:

(Start: 15 @28959 has 38 MA's), (Start: 21 @28935 has 5 MA's), (22, 28932), (42, 28833), (48, 28782), (55, 28746), (59, 28722), (61, 28719), (64, 28698), (65, 28695), (66, 28683),

Gene: Benvolio_38 Start: 28491, Stop: 28207, Start Num: 15

Candidate Starts for Benvolio_38:

(5, 28554), (Start: 15 @28491 has 38 MA's), (Start: 21 @28467 has 5 MA's), (22, 28464), (42, 28365), (59, 28254), (61, 28251), (65, 28227),

Gene: Bipper_130 Start: 74639, Stop: 74914, Start Num: 15

Candidate Starts for Bipper_130:

(Start: 15 @74639 has 38 MA's), (16, 74642), (Start: 21 @74666 has 5 MA's), (25, 74690), (26, 74693), (29, 74714), (30, 74717), (43, 74771), (46, 74795), (60, 74870), (62, 74873), (64, 74891),

Gene: BogosyJay_42 Start: 29291, Stop: 29019, Start Num: 14

Candidate Starts for BogosyJay_42:

(Start: 14 @29291 has 12 MA's), (30, 29213), (39, 29186), (40, 29177), (42, 29168), (44, 29147), (59, 29066),

Gene: Buggy_43 Start: 29586, Stop: 29302, Start Num: 15

Candidate Starts for Buggy_43:

(5, 29649), (Start: 15 @29586 has 38 MA's), (Start: 21 @29562 has 5 MA's), (22, 29559), (24, 29550), (42, 29460), (48, 29409), (50, 29403), (61, 29346),

Gene: CRB1_43 Start: 29506, Stop: 29222, Start Num: 15

Candidate Starts for CRB1_43:

(Start: 15 @29506 has 38 MA's), (Start: 21 @29482 has 5 MA's), (22, 29479), (48, 29329), (50, 29323), (59, 29269), (61, 29266),

Gene: Centaur_42 Start: 29431, Stop: 29147, Start Num: 15

Candidate Starts for Centaur_42:

(3, 29635), (5, 29494), (Start: 15 @29431 has 38 MA's), (Start: 21 @29407 has 5 MA's), (22, 29404), (24, 29395), (42, 29305), (48, 29254), (50, 29248), (61, 29191),

Gene: Changeling_43 Start: 30267, Stop: 29977, Start Num: 15

Candidate Starts for Changeling_43:

(Start: 15 @30267 has 38 MA's), (Start: 21 @30243 has 5 MA's), (22, 30240), (33, 30189), (49, 30096), (50, 30093), (61, 30036),

Gene: Charm_40 Start: 28780, Stop: 28505, Start Num: 15

Candidate Starts for Charm_40:

(Start: 15 @28780 has 38 MA's), (Start: 21 @28756 has 5 MA's), (23, 28750), (24, 28744), (39, 28678), (42, 28660), (43, 28657), (44, 28639), (58, 28561), (59, 28558), (61, 28555),

Gene: ChipMunk_44 Start: 30914, Stop: 30654, Start Num: 21

Candidate Starts for ChipMunk_44:

(5, 31001), (Start: 15 @30938 has 38 MA's), (Start: 21 @30914 has 5 MA's), (22, 30911), (42, 30812), (43, 30809), (61, 30698), (65, 30674),

Gene: Crucio_41 Start: 29021, Stop: 28737, Start Num: 15

Candidate Starts for Crucio_41:

(5, 29084), (Start: 15 @29021 has 38 MA's), (Start: 21 @28997 has 5 MA's), (22, 28994), (43, 28892), (65, 28757),

Gene: Dalmatian_42 Start: 29414, Stop: 29130, Start Num: 15

Candidate Starts for Dalmatian_42:

(5, 29477), (Start: 15 @29414 has 38 MA's), (Start: 21 @29390 has 5 MA's), (22, 29387), (24, 29378), (42, 29288), (43, 29285), (61, 29174),

Gene: DeerParkTS_40 Start: 28752, Stop: 28492, Start Num: 21

Candidate Starts for DeerParkTS_40:

(Start: 15 @28776 has 38 MA's), (Start: 21 @28752 has 5 MA's), (22, 28749), (24, 28740), (43, 28647), (44, 28632), (48, 28599), (61, 28536), (64, 28515),

Gene: Deloris_40 Start: 28628, Stop: 28329, Start Num: 15

Candidate Starts for Deloris_40:

(Start: 15 @28628 has 38 MA's), (Start: 21 @28604 has 5 MA's), (22, 28601), (42, 28502), (48, 28451), (59, 28391), (61, 28388), (64, 28367), (65, 28364), (66, 28352),

Gene: Drake94_39 Start: 28139, Stop: 27858, Start Num: 15

Candidate Starts for Drake94_39:

(Start: 14 @28142 has 12 MA's), (Start: 15 @28139 has 38 MA's), (24, 28103), (31, 28064), (33, 28058), (46, 27992), (48, 27968), (50, 27962), (61, 27902),

Gene: DreamTeam1_40 Start: 28657, Stop: 28388, Start Num: 14

Candidate Starts for DreamTeam1_40:

(Start: 14 @28657 has 12 MA's), (Start: 21 @28639 has 5 MA's), (24, 28627), (28, 28594), (42, 28543), (43, 28540), (44, 28522), (59, 28441), (61, 28438), (63, 28420),

Gene: DudeLittle_40 Start: 29080, Stop: 28796, Start Num: 15

Candidate Starts for DudeLittle_40:

(5, 29143), (Start: 15 @29080 has 38 MA's), (Start: 21 @29056 has 5 MA's), (22, 29053), (24, 29044), (42, 28954), (43, 28951), (61, 28840),

Gene: Dulcie_44 Start: 32784, Stop: 32470, Start Num: 8

Candidate Starts for Dulcie_44:

(Start: 6 @32808 has 7 MA's), (Start: 8 @32784 has 10 MA's), (19, 32748), (20, 32739), (Start: 21 @32733 has 5 MA's), (32, 32673), (37, 32658), (47, 32589), (57, 32520), (61, 32514),

Gene: Echild_41 Start: 28515, Stop: 28231, Start Num: 15

Candidate Starts for Echild_41:

(5, 28578), (Start: 15 @28515 has 38 MA's), (Start: 21 @28491 has 5 MA's), (22, 28488), (42, 28389), (59, 28278), (61, 28275), (65, 28251),

Gene: EvilGenius_44 Start: 30918, Stop: 30658, Start Num: 21

Candidate Starts for EvilGenius_44:

(5, 31005), (Start: 15 @30942 has 38 MA's), (Start: 21 @30918 has 5 MA's), (22, 30915), (42, 30816), (43, 30813), (61, 30702), (65, 30678),

Gene: Faiyaz_127 Start: 73078, Stop: 73350, Start Num: 15

Candidate Starts for Faiyaz_127:

(Start: 15 @73078 has 38 MA's), (20, 73096), (25, 73126), (29, 73150), (42, 73204), (45, 73228), (50, 73261), (60, 73306), (62, 73309),

Gene: Fameo_41 Start: 29208, Stop: 28924, Start Num: 15

Candidate Starts for Fameo_41:

(3, 29412), (5, 29271), (Start: 15 @29208 has 38 MA's), (Start: 21 @29184 has 5 MA's), (22, 29181), (24, 29172), (61, 28968),

Gene: FiringLine_41 Start: 29002, Stop: 28718, Start Num: 15

Candidate Starts for FiringLine_41:

(5, 29065), (Start: 15 @29002 has 38 MA's), (Start: 21 @28978 has 5 MA's), (22, 28975), (43, 28873), (65, 28738),

Gene: First_0041 Start: 28870, Stop: 28571, Start Num: 15

Candidate Starts for First_0041:

(Start: 15 @28870 has 38 MA's), (Start: 21 @28846 has 5 MA's), (22, 28843), (42, 28744), (48, 28693), (59, 28633), (61, 28630), (64, 28609), (65, 28606), (66, 28594),

Gene: Flare16_41 Start: 29094, Stop: 28810, Start Num: 15

Candidate Starts for Flare16_41:

(3, 29298), (5, 29157), (Start: 15 @29094 has 38 MA's), (Start: 21 @29070 has 5 MA's), (22, 29067), (42, 28968), (48, 28917), (50, 28911), (61, 28854),

Gene: ForesterFrank_42 Start: 30336, Stop: 30046, Start Num: 15

Candidate Starts for ForesterFrank_42:

(Start: 15 @30336 has 38 MA's), (Start: 21 @30312 has 5 MA's), (22, 30309), (33, 30258), (50, 30162), (61, 30105),

Gene: Gail_48 Start: 31208, Stop: 30876, Start Num: 7

Candidate Starts for Gail_48:

(Start: 7 @31208 has 5 MA's), (11, 31172), (17, 31157), (40, 31052), (48, 30989), (50, 30983), (59, 30926), (61, 30923),

Gene: Gandalf20_45 Start: 33631, Stop: 33317, Start Num: 8

Candidate Starts for Gandalf20_45:

(Start: 6 @33655 has 7 MA's), (Start: 8 @33631 has 10 MA's), (10, 33619), (19, 33595), (20, 33586), (Start: 21 @33580 has 5 MA's), (32, 33520), (47, 33436), (51, 33415), (57, 33367), (61, 33361),

Gene: GaugeLDP_41 Start: 29706, Stop: 29422, Start Num: 15

Candidate Starts for GaugeLDP_41:

(4, 29772), (Start: 15 @29706 has 38 MA's), (Start: 21 @29682 has 5 MA's), (44, 29568), (52, 29514), (59, 29475), (61, 29472), (64, 29451),

Gene: Georgie2_42 Start: 29047, Stop: 28763, Start Num: 15

Candidate Starts for Georgie2_42:

(5, 29110), (Start: 15 @29047 has 38 MA's), (Start: 21 @29023 has 5 MA's), (22, 29020), (43, 28918), (65, 28783),

Gene: Gwendoluna_46 Start: 34721, Stop: 34383, Start Num: 6

Candidate Starts for Gwendoluna_46:

(Start: 6 @34721 has 7 MA's), (Start: 8 @34697 has 10 MA's), (19, 34661), (20, 34652), (Start: 21 @34646 has 5 MA's), (32, 34586), (47, 34502), (57, 34433), (61, 34427),

Gene: Hilltopfarm_129 Start: 73903, Stop: 74175, Start Num: 15

Candidate Starts for Hilltopfarm_129:

(Start: 15 @73903 has 38 MA's), (20, 73921), (25, 73951), (29, 73975), (42, 74029), (45, 74053), (50, 74086), (60, 74131), (62, 74134),

Gene: HippoHollow_42 Start: 30769, Stop: 30515, Start Num: 21

Candidate Starts for HippoHollow_42:

(4, 30859), (Start: 15 @30793 has 38 MA's), (Start: 21 @30769 has 5 MA's), (44, 30655), (50, 30616), (59, 30562), (61, 30559), (64, 30538),

Gene: Ichabod_45 Start: 33014, Stop: 32676, Start Num: 6

Candidate Starts for Ichabod_45:

(Start: 6 @33014 has 7 MA's), (Start: 8 @32990 has 10 MA's), (10, 32978), (19, 32954), (20, 32945),
(Start: 21 @32939 has 5 MA's), (32, 32879), (47, 32795), (57, 32726), (61, 32720),

Gene: Jeeves_49 Start: 30151, Stop: 29819, Start Num: 7

Candidate Starts for Jeeves_49:

(Start: 7 @30151 has 5 MA's), (11, 30115), (17, 30100), (40, 29995), (42, 29986), (48, 29932), (50, 29926), (56, 29890), (59, 29869), (61, 29866), (67, 29824),

Gene: Jorgensen_44 Start: 32765, Stop: 32427, Start Num: 6

Candidate Starts for Jorgensen_44:

(Start: 6 @32765 has 7 MA's), (Start: 8 @32741 has 10 MA's), (10, 32729), (19, 32705), (20, 32696),
(Start: 21 @32690 has 5 MA's), (32, 32630), (47, 32546), (57, 32477), (61, 32471),

Gene: JoshKayV_43 Start: 29529, Stop: 29245, Start Num: 15

Candidate Starts for JoshKayV_43:

(5, 29592), (Start: 15 @29529 has 38 MA's), (Start: 21 @29505 has 5 MA's), (43, 29400), (48, 29352),
(59, 29292), (61, 29289),

Gene: Journey13_39 Start: 28370, Stop: 28092, Start Num: 9

Candidate Starts for Journey13_39:

(Start: 9 @28370 has 1 MA's), (18, 28346), (29, 28283), (36, 28265), (54, 28160), (58, 28142),

Gene: KingCyrus_44 Start: 30913, Stop: 30653, Start Num: 21

Candidate Starts for KingCyrus_44:

(5, 31000), (Start: 15 @30937 has 38 MA's), (Start: 21 @30913 has 5 MA's), (22, 30910), (42, 30811),
(43, 30808), (61, 30697), (65, 30673),

Gene: Kinmap_42 Start: 28859, Stop: 28578, Start Num: 9

Candidate Starts for Kinmap_42:

(Start: 9 @28859 has 1 MA's), (32, 28760), (57, 28631),

Gene: KittenMittens_38 Start: 28150, Stop: 27866, Start Num: 14

Candidate Starts for KittenMittens_38:

(Start: 14 @28150 has 12 MA's), (Start: 15 @28147 has 38 MA's), (24, 28111), (31, 28072), (33, 28066), (46, 28000), (48, 27976), (50, 27970), (61, 27910),

Gene: Klodlith_41 Start: 28674, Stop: 28405, Start Num: 14

Candidate Starts for Klodlith_41:

(Start: 14 @28674 has 12 MA's), (Start: 21 @28656 has 5 MA's), (24, 28644), (42, 28560), (43, 28557),
(44, 28539), (59, 28458), (61, 28455), (63, 28437),

Gene: LadyBird_44 Start: 29444, Stop: 29184, Start Num: 21

Candidate Starts for LadyBird_44:

(Start: 15 @29468 has 38 MA's), (Start: 21 @29444 has 5 MA's), (22, 29441), (48, 29291), (50, 29285),
(59, 29231), (61, 29228), (64, 29207), (65, 29204),

Gene: Lamina13_44 Start: 32540, Stop: 32226, Start Num: 8

Candidate Starts for Lamina13_44:

(Start: 6 @32564 has 7 MA's), (Start: 8 @32540 has 10 MA's), (19, 32504), (20, 32495), (Start: 21 @32489 has 5 MA's), (32, 32429), (47, 32345), (57, 32276), (61, 32270),

Gene: Larenn_41 Start: 29331, Stop: 29047, Start Num: 15

Candidate Starts for Larenn_41:

(3, 29535), (5, 29394), (Start: 15 @29331 has 38 MA's), (Start: 21 @29307 has 5 MA's), (22, 29304), (42, 29205), (61, 29091),

Gene: Levia_41 Start: 32589, Stop: 32275, Start Num: 8

Candidate Starts for Levia_41:

(Start: 6 @32613 has 7 MA's), (Start: 8 @32589 has 10 MA's), (10, 32577), (19, 32553), (20, 32544), (Start: 21 @32538 has 5 MA's), (32, 32478), (47, 32394), (51, 32373), (57, 32325), (61, 32319),

Gene: LionsBait_44 Start: 30752, Stop: 30498, Start Num: 21

Candidate Starts for LionsBait_44:

(4, 30842), (Start: 15 @30776 has 38 MA's), (Start: 21 @30752 has 5 MA's), (44, 30638), (50, 30599), (59, 30545), (61, 30542), (64, 30521),

Gene: Loser_44 Start: 30219, Stop: 29929, Start Num: 15

Candidate Starts for Loser_44:

(Start: 15 @30219 has 38 MA's), (Start: 21 @30195 has 5 MA's), (22, 30192), (50, 30045), (61, 29988),

Gene: Luchador_49 Start: 31942, Stop: 31610, Start Num: 7

Candidate Starts for Luchador_49:

(Start: 7 @31942 has 5 MA's), (17, 31891), (40, 31786), (42, 31777), (48, 31723), (50, 31717), (56, 31681), (59, 31660), (61, 31657), (67, 31615),

Gene: Malec_42 Start: 29895, Stop: 29611, Start Num: 15

Candidate Starts for Malec_42:

(3, 30099), (5, 29958), (Start: 15 @29895 has 38 MA's), (Start: 21 @29871 has 5 MA's), (22, 29868), (42, 29769), (61, 29655),

Gene: Maminiaina_42 Start: 29273, Stop: 29001, Start Num: 14

Candidate Starts for Maminiaina_42:

(Start: 14 @29273 has 12 MA's), (30, 29195), (39, 29168), (40, 29159), (42, 29150), (44, 29129), (59, 29048),

Gene: Michley_43 Start: 32375, Stop: 32061, Start Num: 8

Candidate Starts for Michley_43:

(Start: 6 @32399 has 7 MA's), (Start: 8 @32375 has 10 MA's), (19, 32339), (20, 32330), (Start: 21 @32324 has 5 MA's), (32, 32264), (47, 32180), (51, 32159), (57, 32111), (61, 32105),

Gene: NaSiaTalie_41 Start: 29091, Stop: 28807, Start Num: 15

Candidate Starts for NaSiaTalie_41:

(2, 29439), (3, 29295), (5, 29154), (Start: 15 @29091 has 38 MA's), (Start: 21 @29067 has 5 MA's), (22, 29064), (24, 29055), (42, 28965), (48, 28914), (50, 28908), (61, 28851),

Gene: Parliament_43 Start: 33053, Stop: 32715, Start Num: 6

Candidate Starts for Parliament_43:

(Start: 6 @33053 has 7 MA's), (Start: 8 @33029 has 10 MA's), (19, 32993), (20, 32984), (Start: 21 @32978 has 5 MA's), (32, 32918), (47, 32834), (57, 32765), (61, 32759),

Gene: PeaceMeal1_39 Start: 28151, Stop: 27867, Start Num: 14

Candidate Starts for PeaceMeal1_39:

(Start: 14 @28151 has 12 MA's), (Start: 15 @28148 has 38 MA's), (24, 28112), (31, 28073), (33, 28067), (46, 28001), (48, 27977), (50, 27971), (61, 27911),

Gene: Peterson_47 Start: 35204, Stop: 34866, Start Num: 6

Candidate Starts for Peterson_47:

(Start: 6 @35204 has 7 MA's), (Start: 8 @35180 has 10 MA's), (10, 35168), (19, 35144), (20, 35135),
(Start: 21 @35129 has 5 MA's), (32, 35069), (47, 34985), (57, 34916), (61, 34910),

Gene: PhineBark_43 Start: 33607, Stop: 33293, Start Num: 8

Candidate Starts for PhineBark_43:

(Start: 6 @33631 has 7 MA's), (Start: 8 @33607 has 10 MA's), (10, 33595), (19, 33571), (20, 33562),
(Start: 21 @33556 has 5 MA's), (32, 33496), (47, 33412), (51, 33391), (57, 33343), (61, 33337),

Gene: Piro94_42 Start: 29683, Stop: 29399, Start Num: 15

Candidate Starts for Piro94_42:

(4, 29749), (Start: 15 @29683 has 38 MA's), (Start: 21 @29659 has 5 MA's), (22, 29656), (28, 29617),
(48, 29515), (50, 29509), (55, 29479), (59, 29455), (61, 29452), (64, 29431),

Gene: Poompha_40 Start: 28149, Stop: 27865, Start Num: 14

Candidate Starts for Poompha_40:

(Start: 14 @28149 has 12 MA's), (Start: 15 @28146 has 38 MA's), (24, 28110), (31, 28071), (33,
28065), (46, 27999), (61, 27909),

Gene: Power_40 Start: 29055, Stop: 28771, Start Num: 15

Candidate Starts for Power_40:

(5, 29118), (Start: 15 @29055 has 38 MA's), (Start: 21 @29031 has 5 MA's), (22, 29028), (43, 28926),
(65, 28791),

Gene: Prudy_40 Start: 29719, Stop: 29435, Start Num: 15

Candidate Starts for Prudy_40:

(1, 30088), (3, 29923), (12, 29728), (Start: 15 @29719 has 38 MA's), (Start: 21 @29695 has 5 MA's),
(22, 29692), (42, 29593), (48, 29542), (50, 29536), (59, 29482), (61, 29479),

Gene: QueenB2_41 Start: 29126, Stop: 28842, Start Num: 15

Candidate Starts for QueenB2_41:

(3, 29330), (5, 29189), (Start: 15 @29126 has 38 MA's), (Start: 21 @29102 has 5 MA's), (22, 29099),
(24, 29090), (61, 28886),

Gene: QueenBeesly_41 Start: 29002, Stop: 28718, Start Num: 15

Candidate Starts for QueenBeesly_41:

(5, 29065), (Start: 15 @29002 has 38 MA's), (Start: 21 @28978 has 5 MA's), (22, 28975), (43, 28873),
(65, 28738),

Gene: RedRock_44 Start: 30432, Stop: 30142, Start Num: 15

Candidate Starts for RedRock_44:

(Start: 15 @30432 has 38 MA's), (Start: 21 @30408 has 5 MA's), (22, 30405), (50, 30258), (61, 30201),

Gene: Retro23_42 Start: 29410, Stop: 29126, Start Num: 15

Candidate Starts for Retro23_42:

(5, 29473), (Start: 15 @29410 has 38 MA's), (Start: 21 @29386 has 5 MA's), (22, 29383), (24, 29374),
(42, 29284), (43, 29281), (61, 29170),

Gene: Rubeus_44 Start: 31227, Stop: 30913, Start Num: 8

Candidate Starts for Rubeus_44:

(Start: 6 @31251 has 7 MA's), (Start: 8 @31227 has 10 MA's), (19, 31191), (20, 31182), (Start: 21
@31176 has 5 MA's), (32, 31116), (47, 31032), (57, 30963), (61, 30957),

Gene: Ruotula_46 Start: 34057, Stop: 33743, Start Num: 8

Candidate Starts for Ruotula_46:

(Start: 6 @34081 has 7 MA's), (Start: 8 @34057 has 10 MA's), (10, 34045), (Start: 21 @34006 has 5 MA's), (32, 33946), (34, 33940), (41, 33907), (45, 33880), (57, 33793),

Gene: SemperFi_42 Start: 29270, Stop: 28986, Start Num: 15

Candidate Starts for SemperFi_42:

(5, 29333), (Start: 15 @29270 has 38 MA's), (Start: 21 @29246 has 5 MA's), (22, 29243), (42, 29144), (43, 29141), (61, 29030),

Gene: Severus_39 Start: 28149, Stop: 27865, Start Num: 14

Candidate Starts for Severus_39:

(Start: 14 @28149 has 12 MA's), (Start: 15 @28146 has 38 MA's), (24, 28110), (31, 28071), (33, 28065), (46, 27999), (48, 27975), (50, 27969), (53, 27951), (61, 27909),

Gene: SheaKeira_41 Start: 28743, Stop: 28474, Start Num: 14

Candidate Starts for SheaKeira_41:

(Start: 14 @28743 has 12 MA's), (Start: 21 @28725 has 5 MA's), (24, 28713), (43, 28626), (44, 28608), (59, 28527), (61, 28524), (63, 28506),

Gene: Sknot_41 Start: 29094, Stop: 28810, Start Num: 15

Candidate Starts for Sknot_41:

(3, 29298), (5, 29157), (Start: 15 @29094 has 38 MA's), (Start: 21 @29070 has 5 MA's), (22, 29067), (42, 28968), (48, 28917), (50, 28911), (61, 28854),

Gene: Smeagol_45 Start: 34099, Stop: 33785, Start Num: 8

Candidate Starts for Smeagol_45:

(Start: 6 @34123 has 7 MA's), (Start: 8 @34099 has 10 MA's), (10, 34087), (Start: 21 @34048 has 5 MA's), (32, 33988), (34, 33982), (41, 33949), (45, 33922), (57, 33835),

Gene: SnapTap_41 Start: 29081, Stop: 28797, Start Num: 15

Candidate Starts for SnapTap_41:

(5, 29144), (Start: 15 @29081 has 38 MA's), (Start: 21 @29057 has 5 MA's), (22, 29054), (43, 28952), (61, 28841),

Gene: SororFago_47 Start: 31263, Stop: 30931, Start Num: 7

Candidate Starts for SororFago_47:

(Start: 7 @31263 has 5 MA's), (11, 31227), (17, 31212), (26, 31164), (40, 31107), (42, 31098), (48, 31044), (50, 31038), (56, 31002), (59, 30981), (61, 30978), (67, 30936),

Gene: Sunhee_46 Start: 29397, Stop: 29065, Start Num: 7

Candidate Starts for Sunhee_46:

(Start: 7 @29397 has 5 MA's), (11, 29361), (17, 29346), (38, 29250), (40, 29241), (42, 29232), (48, 29178), (50, 29172), (59, 29115), (61, 29112), (62, 29109),

Gene: SweetiePie_41 Start: 29081, Stop: 28797, Start Num: 15

Candidate Starts for SweetiePie_41:

(5, 29144), (Start: 15 @29081 has 38 MA's), (Start: 21 @29057 has 5 MA's), (22, 29054), (43, 28952), (61, 28841), (65, 28817),

Gene: Tasp14_45 Start: 33188, Stop: 32850, Start Num: 6

Candidate Starts for Tasp14_45:

(Start: 6 @33188 has 7 MA's), (Start: 8 @33164 has 10 MA's), (19, 33128), (20, 33119), (Start: 21 @33113 has 5 MA's), (32, 33053), (47, 32969), (57, 32900), (61, 32894),

Gene: Terrific_44 Start: 29446, Stop: 29162, Start Num: 15

Candidate Starts for Terrific_44:

(3, 29650), (5, 29509), (Start: 15 @29446 has 38 MA's), (Start: 21 @29422 has 5 MA's), (22, 29419), (24, 29410), (42, 29320), (48, 29269), (50, 29263), (61, 29206),

Gene: Trike_38 Start: 27982, Stop: 27698, Start Num: 14

Candidate Starts for Trike_38:

(Start: 14 @27982 has 12 MA's), (Start: 15 @27979 has 38 MA's), (24, 27943), (31, 27904), (33, 27898), (46, 27832), (61, 27742),

Gene: Trooper_43 Start: 29540, Stop: 29247, Start Num: 13

Candidate Starts for Trooper_43:

(Start: 13 @29540 has 1 MA's), (Start: 21 @29516 has 5 MA's), (22, 29513), (24, 29504), (33, 29453), (42, 29414), (48, 29363), (50, 29357), (59, 29303), (61, 29300), (64, 29279),

Gene: Vanisoa_42 Start: 29998, Stop: 29699, Start Num: 14

Candidate Starts for Vanisoa_42:

(Start: 14 @29998 has 12 MA's), (24, 29947), (25, 29935), (26, 29932), (35, 29896), (39, 29881), (42, 29863), (44, 29842), (59, 29761),

Gene: Yecey3_44 Start: 28948, Stop: 28664, Start Num: 14

Candidate Starts for Yecey3_44:

(Start: 14 @28948 has 12 MA's), (Start: 21 @28918 has 5 MA's), (27, 28876), (30, 28867), (39, 28840), (42, 28822), (44, 28801), (45, 28795), (59, 28720),