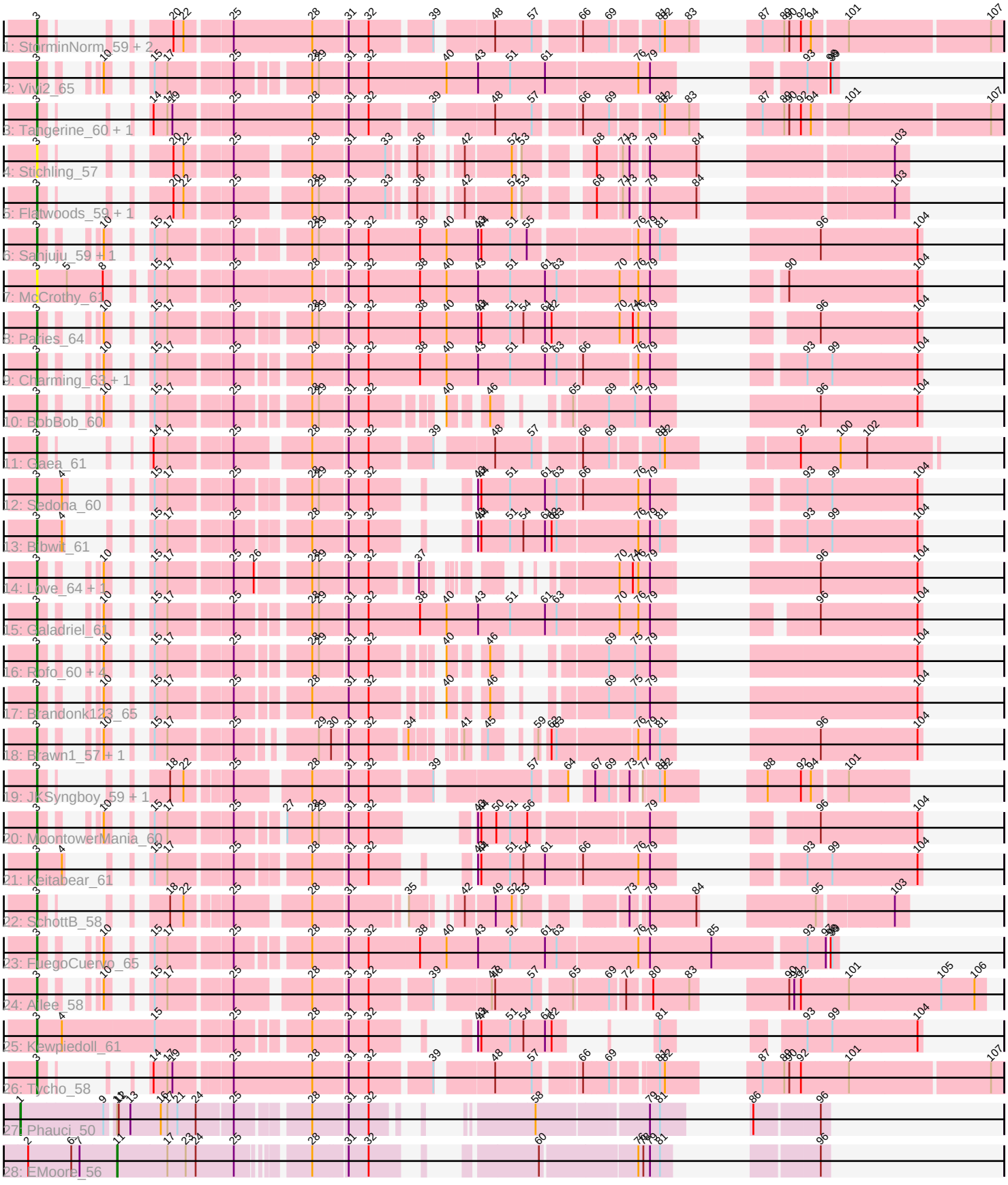
Pham 347786


1: StorminNorm_59 + 2
2: Vivi2_65
3: Tangerine_60 + 1
4: Stichling_57
5: Flatwoods_59 + 1
6: Sanjuju_59 + 1
7: McCrothy_61
8: Paries_64
9: Charming_63 + 1
10: BobBob_60
11: Gaea_61
12: Sedona_60
13: Bibwit_61
14: Love_64 + 1
15: Galadriel_61
16: Rofo_60 + 4
17: Brandonk123_65
18: Brawn1_57 + 1
19: JKSyngboy_59 + 1
20: MoontowerMania_60
21: Keitabear_61
22: SchottB_58
23: FuegoCuervo_65
24: Allee_58
25: Kewpiedoll_61
26: Tycho_58
27: Phauci_50
28: EMoore1_56

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 347786 Report

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

Pham number 347786 has 41 members, 3 are drafts.

Phages represented in each track:
- Track 1 : StorminNorm_59, Saronaya_61, Gustavo_61
- Track 2 : Vivi2_65
- Track 3 : Tangerine_60, Baumdotcom_57
- Track 4 : Stichling_57
- Track 5 : Flatwoods_59, Kroos_59
- Track 6 : Sanjuju_59, Fitzgerald_58
- Track 7 : McCrothy_61
- Track 8 : Paries_64
- Track 9 : Charming_63, Nordenberg_58
- Track 10 : BobBob_60
- Track 11 : Gaea_61
- Track 12 : Sedona_60
- Track 13 : Bibwit_61
- Track 14 : Love_64, Shivanishola_59
- Track 15 : Galadriel_61
- Track 16 : Rofo_60, Tangent_62, Kamashten_60, Fosterous_63, Thing3_60
- Track 17 : Brandonk123_65
- Track 18 : Brawn1_57, Jabberwocky_59
- Track 19 : JKSyngboy_59, Baddon_59
- Track 20 : MoontowerMania_60
- Track 21 : Keitabear_61
- Track 22 : SchottB_58
- Track 23 : FuegoCuervo_65
- Track 24 : Ailee_58
- Track 25 : Kewpiedoll_61
- Track 26 : Tycho_58
- Track 27 : Phauci_50
- Track 28 : EMoore_56

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

The start number called the most often in the published annotations is 3, it was called in 36 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ailee_58, Baddon_59, Baumdotcom_57, Bibwit_61, BobBob_60, Brandonk123_65, Brawn1_57, Charming_63, Fitzgerald_58, Flatwoods_59, Fosterous_63, FuegoCuervo_65, Gaea_61, Galadriel_61, Gustavo_61, JKSyngboy_59, Jabberwocky_59, Kamashten_60, Keitabear_61, Kewpiedoll_61, Kroos_59, Love_64, McCrothy_61, MoontowerMania_60, Nordenberg_58, Paries_64, Rofo_60, Sanjuju_59, Saronaya_61, SchottB_58, Sedona_60, Shivanishola_59, Stichling_57, StorminNorm_59, Tangent_62, Tangerine_60, Thing3_60, Tycho_58, Vivi2_65,

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

Genes that do not have the "Most Annotated" start:
• EMoore_56, Phauci_50,

Summary by start number:

Start 1:
• Found in 1 of 41 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phauci_50 (DE2),

Start 3:
• Found in 39 of 41 (95.1%) of genes in pham
• Manual Annotations of this start: 36 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ailee_58 (DE1), Baddon_59 (DE1), Baumdotcom_57 (DE1), Bibwit_61 (DE1), BobBob_60 (DE1), Brandonk123_65 (DE1), Brawn1_57 (DE1), Charming_63 (DE1), Fitzgerald_58 (DE1), Flatwoods_59 (DE1), Fosterous_63 (DE1), FuegoCuervo_65 (DE1), Gaea_61 (DE1), Galadriel_61 (DE1), Gustavo_61 (DE1), JKSyngboy_59 (DE1), Jabberwocky_59 (DE1), Kamashten_60 (DE1), Keitabear_61 (DE1), Kewpiedoll_61 (DE1), Kroos_59 (DE1), Love_64 (DE1), McCrothy_61 (DE1), MoontowerMania_60 (DE1), Nordenberg_58 (DE1), Paries_64 (DE1), Rofo_60 (DE1), Sanjuju_59 (DE1), Saronaya_61 (DE1), SchottB_58 (DE1), Sedona_60 (DE1), Shivanishola_59 (DE1), Stichling_57 (DE1), StorminNorm_59 (DE1), Tangent_62 (DE1), Tangerine_60 (DE1), Thing3_60 (DE1), Tycho_58 (DE1), Vivi2_65 (DE1),

Start 11:
• Found in 2 of 41 (4.9%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 50.0% of time when present
• Phage (with cluster) where this start called: EMoore_56 (DE2),

Summary by clusters:

There are 2 clusters represented in this pham: DE1, DE2,

Info for manual annotations of cluster DE1:
•Start number 3 was manually annotated 36 times for cluster DE1.

Info for manual annotations of cluster DE2:

•Start number 1 was manually annotated 1 time for cluster DE2.
•Start number 11 was manually annotated 1 time for cluster DE2.

Gene Information:

Gene: Ailee_58 Start: 48107, Stop: 49438, Start Num: 3
Candidate Starts for Ailee_58:
(Start: 3 @48107 has 36 MA's), (10, 48152), (15, 48179), (17, 48200), (25, 48302), (28, 48416), (31, 48473), (32, 48509), (39, 48611), (47, 48689), (48, 48695), (57, 48761), (65, 48818), (69, 48875), (72, 48899), (80, 48938), (83, 49001), (90, 49094), (91, 49103), (92, 49115), (101, 49193), (105, 49358), (106, 49418),

Gene: Baddon_59 Start: 48114, Stop: 49244, Start Num: 3
Candidate Starts for Baddon_59:
(Start: 3 @48114 has 36 MA's), (18, 48180), (22, 48204), (25, 48273), (28, 48387), (31, 48444), (32, 48480), (39, 48582), (57, 48732), (64, 48783), (67, 48804), (69, 48828), (73, 48858), (77, 48873), (81, 48900), (82, 48909), (88, 49005), (92, 49065), (94, 49083), (101, 49137),

Gene: Baumdotcom_57 Start: 46701, Stop: 48035, Start Num: 3
Candidate Starts for Baumdotcom_57:
(Start: 3 @46701 has 36 MA's), (14, 46734), (17, 46755), (19, 46764), (25, 46857), (28, 46995), (31, 47052), (32, 47088), (39, 47190), (48, 47274), (57, 47340), (66, 47409), (69, 47454), (81, 47529), (82, 47538), (83, 47580), (87, 47625), (89, 47664), (90, 47673), (92, 47694), (94, 47712), (101, 47766), (107, 48012),

Gene: Bibwit_61 Start: 48153, Stop: 49274, Start Num: 3
Candidate Starts for Bibwit_61:
(Start: 3 @48153 has 36 MA's), (4, 48198), (15, 48225), (17, 48246), (25, 48348), (28, 48462), (31, 48519), (32, 48555), (43, 48636), (44, 48642), (51, 48693), (54, 48717), (61, 48756), (62, 48768), (63, 48777), (76, 48915), (79, 48936), (81, 48954), (93, 49068), (99, 49113), (104, 49266),

Gene: BobBob_60 Start: 47974, Stop: 49047, Start Num: 3
Candidate Starts for BobBob_60:
(Start: 3 @47974 has 36 MA's), (10, 48019), (15, 48046), (17, 48067), (25, 48169), (28, 48280), (29, 48292), (31, 48337), (32, 48373), (40, 48466), (46, 48514), (65, 48571), (69, 48628), (75, 48673), (79, 48700), (96, 48865), (104, 49039),

Gene: Brandonk123_65 Start: 48648, Stop: 49724, Start Num: 3
Candidate Starts for Brandonk123_65:
(Start: 3 @48648 has 36 MA's), (10, 48693), (15, 48720), (17, 48741), (25, 48843), (28, 48954), (31, 49017), (32, 49053), (40, 49143), (46, 49191), (69, 49305), (75, 49350), (79, 49377), (104, 49716),

Gene: Brawn1_57 Start: 47927, Stop: 49018, Start Num: 3
Candidate Starts for Brawn1_57:
(Start: 3 @47927 has 36 MA's), (10, 47972), (15, 47999), (17, 48020), (25, 48122), (29, 48233), (30, 48254), (31, 48278), (32, 48314), (34, 48371), (41, 48428), (45, 48452), (59, 48491), (62, 48503), (63, 48512), (76, 48647), (79, 48668), (81, 48686), (96, 48836), (104, 49010),

Gene: Charming_63 Start: 47762, Stop: 48985, Start Num: 3
Candidate Starts for Charming_63:

(Start: 3 @47762 has 36 MA's), (10, 47807), (15, 47834), (17, 47855), (25, 47957), (28, 48068), (31, 48125), (32, 48161), (38, 48254), (40, 48302), (43, 48359), (51, 48416), (61, 48479), (63, 48500), (66, 48542), (76, 48626), (79, 48647), (93, 48779), (99, 48824), (104, 48977),

Gene: EMoore_56 Start: 47210, Stop: 48160, Start Num: 11
Candidate Starts for EMoore_56:
(2, 47051), (6, 47129), (7, 47144), (Start: 11 @47210 has 1 MA's), (17, 47300), (23, 47333), (24, 47351), (25, 47420), (28, 47522), (31, 47579), (32, 47615), (60, 47804), (76, 47969), (78, 47978), (79, 47990), (81, 48008), (96, 48146),

Gene: Fitzgerald_58 Start: 48818, Stop: 50050, Start Num: 3
Candidate Starts for Fitzgerald_58:
(Start: 3 @48818 has 36 MA's), (10, 48863), (15, 48890), (17, 48911), (25, 49013), (28, 49127), (29, 49139), (31, 49184), (32, 49220), (38, 49310), (40, 49358), (43, 49415), (44, 49421), (51, 49472), (55, 49502), (76, 49679), (79, 49700), (81, 49718), (96, 49868), (104, 50042),

Gene: Flatwoods_59 Start: 46541, Stop: 47608, Start Num: 3
Candidate Starts for Flatwoods_59:
(Start: 3 @46541 has 36 MA's), (20, 46613), (22, 46631), (25, 46706), (28, 46820), (29, 46832), (31, 46877), (33, 46943), (36, 46973), (42, 47018), (52, 47090), (53, 47099), (68, 47186), (71, 47225), (73, 47234), (79, 47255), (84, 47339), (103, 47585),

Gene: Fosterous_63 Start: 48909, Stop: 49979, Start Num: 3
Candidate Starts for Fosterous_63:
(Start: 3 @48909 has 36 MA's), (10, 48954), (15, 48981), (17, 49002), (25, 49104), (28, 49215), (29, 49227), (31, 49272), (32, 49308), (40, 49398), (46, 49446), (69, 49560), (75, 49605), (79, 49632), (104, 49971),

Gene: FuegoCuervo_65 Start: 48426, Stop: 49637, Start Num: 3
Candidate Starts for FuegoCuervo_65:
(Start: 3 @48426 has 36 MA's), (10, 48471), (15, 48498), (17, 48519), (25, 48621), (28, 48732), (31, 48789), (32, 48825), (38, 48915), (40, 48963), (43, 49020), (51, 49077), (61, 49140), (63, 49161), (76, 49299), (79, 49320), (85, 49431), (93, 49587), (97, 49620), (98, 49623), (99, 49626),

Gene: Gaea_61 Start: 47107, Stop: 48300, Start Num: 3
Candidate Starts for Gaea_61:
(Start: 3 @47107 has 36 MA's), (14, 47140), (17, 47161), (25, 47263), (28, 47377), (31, 47434), (32, 47470), (39, 47572), (48, 47656), (57, 47722), (66, 47794), (69, 47839), (81, 47914), (82, 47923), (92, 48070), (100, 48133), (102, 48181),

Gene: Galadriel_61 Start: 49042, Stop: 50259, Start Num: 3
Candidate Starts for Galadriel_61:
(Start: 3 @49042 has 36 MA's), (10, 49087), (15, 49114), (17, 49135), (25, 49237), (28, 49348), (29, 49360), (31, 49405), (32, 49441), (38, 49531), (40, 49579), (43, 49636), (51, 49693), (61, 49756), (63, 49777), (70, 49882), (76, 49915), (79, 49936), (96, 50077), (104, 50251),

Gene: Gustavo_61 Start: 47618, Stop: 48964, Start Num: 3
Candidate Starts for Gustavo_61:
(Start: 3 @47618 has 36 MA's), (20, 47690), (22, 47708), (25, 47783), (28, 47921), (31, 47978), (32, 48014), (39, 48116), (48, 48200), (57, 48266), (66, 48338), (69, 48383), (81, 48458), (82, 48467), (83, 48509), (87, 48554), (89, 48593), (90, 48602), (92, 48623), (94, 48641), (101, 48695), (107, 48941),

Gene: JKSyngboy_59 Start: 48219, Stop: 49349, Start Num: 3

Candidate Starts for JKSyngboy_59:
(Start: 3 @48219 has 36 MA's), (18, 48285), (22, 48309), (25, 48378), (28, 48492), (31, 48549), (32, 48585), (39, 48687), (57, 48837), (64, 48888), (67, 48909), (69, 48933), (73, 48963), (77, 48978), (81, 49005), (82, 49014), (88, 49110), (92, 49170), (94, 49188), (101, 49242),

Gene: Jabberwocky_59 Start: 49193, Stop: 50284, Start Num: 3
Candidate Starts for Jabberwocky_59:
(Start: 3 @49193 has 36 MA's), (10, 49238), (15, 49265), (17, 49286), (25, 49388), (29, 49499), (30, 49520), (31, 49544), (32, 49580), (34, 49637), (41, 49694), (45, 49718), (59, 49757), (62, 49769), (63, 49778), (76, 49913), (79, 49934), (81, 49952), (96, 50102), (104, 50276),

Gene: Kamashten_60 Start: 48087, Stop: 49157, Start Num: 3
Candidate Starts for Kamashten_60:
(Start: 3 @48087 has 36 MA's), (10, 48132), (15, 48159), (17, 48180), (25, 48282), (28, 48393), (29, 48405), (31, 48450), (32, 48486), (40, 48576), (46, 48624), (69, 48738), (75, 48783), (79, 48810), (104, 49149),

Gene: Keitabear_61 Start: 49762, Stop: 50880, Start Num: 3
Candidate Starts for Keitabear_61:
(Start: 3 @49762 has 36 MA's), (4, 49807), (15, 49834), (17, 49855), (25, 49957), (28, 50071), (31, 50128), (32, 50164), (43, 50245), (44, 50251), (51, 50302), (54, 50326), (61, 50365), (66, 50428), (76, 50521), (79, 50542), (93, 50674), (99, 50719), (104, 50872),

Gene: Kewpiedoll_61 Start: 49141, Stop: 50238, Start Num: 3
Candidate Starts for Kewpiedoll_61:
(Start: 3 @49141 has 36 MA's), (4, 49186), (15, 49351), (25, 49474), (28, 49585), (31, 49642), (32, 49678), (43, 49759), (44, 49765), (51, 49816), (54, 49840), (61, 49879), (62, 49891), (81, 49930), (93, 50032), (99, 50077), (104, 50230),

Gene: Kroos_59 Start: 47638, Stop: 48705, Start Num: 3
Candidate Starts for Kroos_59:
(Start: 3 @47638 has 36 MA's), (20, 47710), (22, 47728), (25, 47803), (28, 47917), (29, 47929), (31, 47974), (33, 48040), (36, 48070), (42, 48115), (52, 48187), (53, 48196), (68, 48283), (71, 48322), (73, 48331), (79, 48352), (84, 48436), (103, 48682),

Gene: Love_64 Start: 49089, Stop: 50165, Start Num: 3
Candidate Starts for Love_64:
(Start: 3 @49089 has 36 MA's), (10, 49134), (15, 49161), (17, 49182), (25, 49284), (26, 49320), (28, 49404), (29, 49416), (31, 49461), (32, 49497), (37, 49563), (70, 49764), (74, 49788), (76, 49797), (79, 49818), (96, 49983), (104, 50157),

Gene: McCrothy_61 Start: 49612, Stop: 50943, Start Num: 3
Candidate Starts for McCrothy_61:
(Start: 3 @49612 has 36 MA's), (5, 49666), (8, 49729), (15, 49765), (17, 49786), (25, 49888), (28, 50026), (31, 50077), (32, 50113), (38, 50203), (40, 50251), (43, 50308), (51, 50365), (61, 50428), (63, 50449), (70, 50554), (76, 50587), (79, 50608), (90, 50707), (104, 50935),

Gene: MoontowerMania_60 Start: 49188, Stop: 50267, Start Num: 3
Candidate Starts for MoontowerMania_60:
(Start: 3 @49188 has 36 MA's), (10, 49233), (15, 49260), (17, 49281), (25, 49383), (27, 49449), (28, 49494), (29, 49506), (31, 49551), (32, 49587), (43, 49668), (44, 49674), (50, 49701), (51, 49725), (56, 49755), (79, 49944), (96, 50085), (104, 50259),

Gene: Nordenberg_58 Start: 47326, Stop: 48549, Start Num: 3
Candidate Starts for Nordenberg_58:
(Start: 3 @47326 has 36 MA's), (10, 47371), (15, 47398), (17, 47419), (25, 47521), (28, 47632), (31, 47689), (32, 47725), (38, 47818), (40, 47866), (43, 47923), (51, 47980), (61, 48043), (63, 48064), (66, 48106), (76, 48190), (79, 48211), (93, 48343), (99, 48388), (104, 48541),

Gene: Paries_64 Start: 49225, Stop: 50445, Start Num: 3
Candidate Starts for Paries_64:
(Start: 3 @49225 has 36 MA's), (10, 49270), (15, 49297), (17, 49318), (25, 49420), (28, 49534), (29, 49546), (31, 49591), (32, 49627), (38, 49717), (40, 49765), (43, 49822), (44, 49828), (51, 49879), (54, 49903), (61, 49942), (62, 49954), (70, 50068), (74, 50092), (76, 50101), (79, 50122), (96, 50263), (104, 50437),

Gene: Phauci_50 Start: 43331, Stop: 44437, Start Num: 1
Candidate Starts for Phauci_50:
(Start: 1 @43331 has 1 MA's), (9, 43475), (Start: 11 @43490 has 1 MA's), (12, 43493), (13, 43514), (16, 43568), (17, 43580), (21, 43598), (24, 43631), (25, 43694), (28, 43808), (31, 43868), (32, 43904), (58, 44060), (79, 44243), (81, 44261), (86, 44312), (96, 44423),

Gene: Rofo_60 Start: 48491, Stop: 49561, Start Num: 3
Candidate Starts for Rofo_60:
(Start: 3 @48491 has 36 MA's), (10, 48536), (15, 48563), (17, 48584), (25, 48686), (28, 48797), (29, 48809), (31, 48854), (32, 48890), (40, 48980), (46, 49028), (69, 49142), (75, 49187), (79, 49214), (104, 49553),

Gene: Sanjuju_59 Start: 48950, Stop: 50182, Start Num: 3
Candidate Starts for Sanjuju_59:
(Start: 3 @48950 has 36 MA's), (10, 48995), (15, 49022), (17, 49043), (25, 49145), (28, 49259), (29, 49271), (31, 49316), (32, 49352), (38, 49442), (40, 49490), (43, 49547), (44, 49553), (51, 49604), (55, 49634), (76, 49811), (79, 49832), (81, 49850), (96, 50000), (104, 50174),

Gene: Saronaya_61 Start: 47618, Stop: 48964, Start Num: 3
Candidate Starts for Saronaya_61:
(Start: 3 @47618 has 36 MA's), (20, 47690), (22, 47708), (25, 47783), (28, 47921), (31, 47978), (32, 48014), (39, 48116), (48, 48200), (57, 48266), (66, 48338), (69, 48383), (81, 48458), (82, 48467), (83, 48509), (87, 48554), (89, 48593), (90, 48602), (92, 48623), (94, 48641), (101, 48695), (107, 48941),

Gene: SchottB_58 Start: 47810, Stop: 48874, Start Num: 3
Candidate Starts for SchottB_58:
(Start: 3 @47810 has 36 MA's), (18, 47876), (22, 47900), (25, 47969), (28, 48083), (31, 48140), (35, 48224), (42, 48284), (49, 48329), (52, 48356), (53, 48365), (73, 48500), (79, 48521), (84, 48605), (95, 48728), (103, 48851),

Gene: Sedona_60 Start: 49583, Stop: 50710, Start Num: 3
Candidate Starts for Sedona_60:
(Start: 3 @49583 has 36 MA's), (4, 49628), (15, 49661), (17, 49682), (25, 49784), (28, 49898), (29, 49910), (31, 49955), (32, 49991), (43, 50072), (44, 50078), (51, 50129), (61, 50192), (63, 50213), (66, 50255), (76, 50351), (79, 50372), (93, 50504), (99, 50549), (104, 50702),

Gene: Shivanishola_59 Start: 46800, Stop: 47876, Start Num: 3
Candidate Starts for Shivanishola_59:
(Start: 3 @46800 has 36 MA's), (10, 46845), (15, 46872), (17, 46893), (25, 46995), (26, 47031), (28, 47115), (29, 47127), (31, 47172), (32, 47208), (37, 47274), (70, 47475), (74, 47499), (76, 47508), (79,

47529), (96, 47694), (104, 47868),

Gene: Stichling_57 Start: 46948, Stop: 48015, Start Num: 3
Candidate Starts for Stichling_57:
(Start: 3 @46948 has 36 MA's), (20, 47020), (22, 47038), (25, 47113), (28, 47227), (31, 47284), (33, 47350), (36, 47380), (42, 47425), (52, 47497), (53, 47506), (68, 47593), (71, 47632), (73, 47641), (79, 47662), (84, 47746), (103, 47992),

Gene: StorminNorm_59 Start: 47260, Stop: 48606, Start Num: 3
Candidate Starts for StorminNorm_59:
(Start: 3 @47260 has 36 MA's), (20, 47332), (22, 47350), (25, 47425), (28, 47563), (31, 47620), (32, 47656), (39, 47758), (48, 47842), (57, 47908), (66, 47980), (69, 48025), (81, 48100), (82, 48109), (83, 48151), (87, 48196), (89, 48235), (90, 48244), (92, 48265), (94, 48283), (101, 48337), (107, 48583),

Gene: Tangent_62 Start: 48196, Stop: 49266, Start Num: 3
Candidate Starts for Tangent_62:
(Start: 3 @48196 has 36 MA's), (10, 48241), (15, 48268), (17, 48289), (25, 48391), (28, 48502), (29, 48514), (31, 48559), (32, 48595), (40, 48685), (46, 48733), (69, 48847), (75, 48892), (79, 48919), (104, 49258),

Gene: Tangerine_60 Start: 47020, Stop: 48357, Start Num: 3
Candidate Starts for Tangerine_60:
(Start: 3 @47020 has 36 MA's), (14, 47053), (17, 47074), (19, 47083), (25, 47176), (28, 47314), (31, 47371), (32, 47407), (39, 47509), (48, 47593), (57, 47659), (66, 47731), (69, 47776), (81, 47851), (82, 47860), (83, 47902), (87, 47947), (89, 47986), (90, 47995), (92, 48016), (94, 48034), (101, 48088), (107, 48334),

Gene: Thing3_60 Start: 48087, Stop: 49157, Start Num: 3
Candidate Starts for Thing3_60:
(Start: 3 @48087 has 36 MA's), (10, 48132), (15, 48159), (17, 48180), (25, 48282), (28, 48393), (29, 48405), (31, 48450), (32, 48486), (40, 48576), (46, 48624), (69, 48738), (75, 48783), (79, 48810), (104, 49149),

Gene: Tycho_58 Start: 46784, Stop: 48127, Start Num: 3
Candidate Starts for Tycho_58:
(Start: 3 @46784 has 36 MA's), (14, 46817), (17, 46838), (19, 46847), (25, 46940), (28, 47078), (31, 47135), (32, 47171), (39, 47273), (48, 47357), (57, 47423), (66, 47492), (69, 47537), (81, 47609), (82, 47618), (87, 47705), (89, 47744), (90, 47753), (92, 47774), (101, 47858), (107, 48104),

Gene: Vivi2_65 Start: 49251, Stop: 50327, Start Num: 3
Candidate Starts for Vivi2_65:
(Start: 3 @49251 has 36 MA's), (10, 49296), (15, 49323), (17, 49344), (25, 49446), (28, 49557), (29, 49569), (31, 49614), (32, 49650), (40, 49788), (43, 49845), (51, 49902), (61, 49965), (76, 50124), (79, 50145), (93, 50277), (98, 50313), (99, 50316),