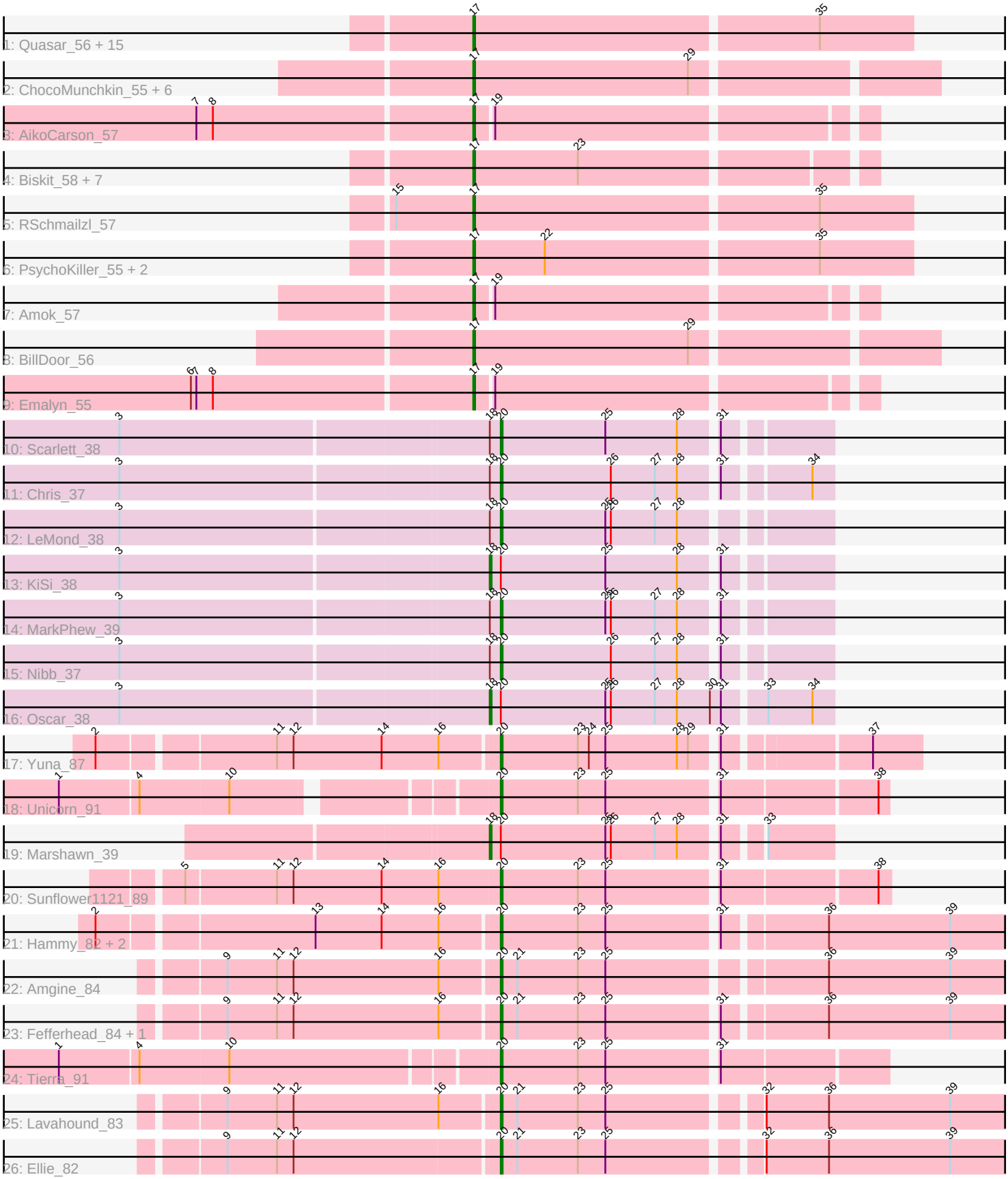
Pham 345772


1: Quasar_56 + 15
2: ChocoMunchkin_55 + 6
3: AikoCarson_57
4: Biskit_58 + 7
5: RSchmailzl_57
6: PsychoKiller_55 + 2
7: Amok_57
8: BillDoor_56
9: Emalyn_55
10: Scarlett_38
11: Chris_37
12: LeMond_38
13: KiSi_38
14: MarkPhew_39
15: Nibb_37
16: Oscar_38
17: Yuna_87
18: Unicorn_91
19: Marshawn_39
20: Sunflower1121_89
21: Hammy_82 + 2
22: Amgine_84
23: Fefferhead_84 + 1
24: Tierra_91
25: Lavahound_83
26: Ellie_82

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 345772 Report

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

Pham number 345772 has 59 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Quasar_56, Starburst_56, Agatha_56, Nina_56, Cozz_54, Socotra_57, Carsonalex_59, SweatNTears_58, RedBaron_62, MunkgeeRoachy_54, Axym_55, Typhonomachy_55, RADical_57, GoldHunter_56, Burnsey_56, Bubble_54
• Track 2 : ChocoMunchkin_55, CanesSauce_55, SteamedHams_57, Yarn_53, CaramelLatte_55, Tolls_57, AndPeggy_53
• Track 3 : AikoCarson_57
• Track 4 : Biskit_58, MScarn_60, Yummy_58, SketchMex_56, Buttrmlkdreams_58, Blondies_59, Troje_58, Horseradish_58
• Track 5 : RSchmailzl_57
• Track 6 : PsychoKiller_55, Sopespian_54, Eliott_56
• Track 7 : Amok_57
• Track 8 : BillDoor_56
• Track 9 : Emalyn_55
• Track 10 : Scarlett_38
• Track 11 : Chris_37
• Track 12 : LeMond_38
• Track 13 : KiSi_38
• Track 14 : MarkPhew_39
• Track 15 : Nibb_37
• Track 16 : Oscar_38
• Track 17 : Yuna_87
• Track 18 : Unicorn_91
• Track 19 : Marshawn_39
• Track 20 : Sunflower1121_89
• Track 21 : Hammy_82, Amohnition_82, DarthP_82
• Track 22 : Amgine_84
• Track 23 : Fefferhead_84, Applecrisp_82
• Track 24 : Tierra_91
• Track 25 : Lavahound_83
• Track 26 : Ellie_82

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

The start number called the most often in the published annotations is 17, it was called in 31 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Agatha_56, AikoCarson_57, Amok_57, AndPeggy_53, Axym_55, BillDoor_56, Biskit_58, Blondies_59, Bubble_54, Burnsey_56, Buttrmlkdreams_58, CanesSauce_55, CaramelLatte_55, Carsonalex_59, ChocoMunchkin_55, Cozz_54, Eliott_56, Emalyn_55, GoldHunter_56, Horseradish_58, MScarn_60, MunkgeeRoachy_54, Nina_56, PsychoKiller_55, Quasar_56, RADical_57, RSchmailzl_57, RedBaron_62, SketchMex_56, Socotra_57, Sopespian_54, Starburst_56, SteamedHams_57, SweatNTears_58, Tolls_57, Troje_58, Typhonomachy_55, Yarn_53, Yummy_58,

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

Genes that do not have the "Most Annotated" start:
• Amgine_84, Amohnition_82, Applecrisp_82, Chris_37, DarthP_82, Ellie_82, Fefferhead_84, Hammy_82, KiSi_38, Lavahound_83, LeMond_38, MarkPhew_39, Marshawn_39, Nibb_37, Oscar_38, Scarlett_38, Sunflower1121_89, Tierra_91, Unicorn_91, Yuna_87,

Summary by start number:

Start 17:
• Found in 39 of 59 (66.1%) of genes in pham
• Manual Annotations of this start: 31 of 51
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Agatha_56 (CT), AikoCarson_57 (CT), Amok_57 (CT), AndPeggy_53 (CT), Axym_55 (CT), BillDoor_56 (CT), Biskit_58 (CT), Blondies_59 (CT), Bubble_54 (CT), Burnsey_56 (CT), Buttrmlkdreams_58 (CT), CanesSauce_55 (CT), CaramelLatte_55 (CT), Carsonalex_59 (CT), ChocoMunchkin_55 (CT), Cozz_54 (CT), Eliott_56 (CT), Emalyn_55 (CT), GoldHunter_56 (CT), Horseradish_58 (CT), MScarn_60 (CT), MunkgeeRoachy_54 (CT), Nina_56 (CT), PsychoKiller_55 (CT), Quasar_56 (CT), RADical_57 (CT), RSchmailzl_57 (CT), RedBaron_62 (CT), SketchMex_56 (CT), Socotra_57 (CT), Sopespian_54 (CT), Starburst_56 (CT), SteamedHams_57 (CT), SweatNTears_58 (CT), Tolls_57 (CT), Troje_58 (CT), Typhonomachy_55 (CT), Yarn_53 (CT), Yummy_58 (CT),

Start 18:
• Found in 8 of 59 (13.6%) of genes in pham
• Manual Annotations of this start: 3 of 51
• Called 37.5% of time when present
• Phage (with cluster) where this start called: KiSi_38 (K1), Marshawn_39 (K6), Oscar_38 (K1),

Start 20:
• Found in 20 of 59 (33.9%) of genes in pham
• Manual Annotations of this start: 17 of 51
• Called 85.0% of time when present
• Phage (with cluster) where this start called: Amgine_84 (K6), Amohnition_82 (K6), Applecrisp_82 (K6), Chris_37 (K1), DarthP_82 (K6), Ellie_82 (K6), Fefferhead_84

(K6), Hammy_82 (K6), Lavahound_83 (K6), LeMond_38 (K1), MarkPhew_39 (K1), Nibb_37 (K1), Scarlett_38 (K1), Sunflower1121_89 (K6), Tierra_91 (K6), Unicorn_91 (K6), Yuna_87 (K6),

Summary by clusters:

There are 3 clusters represented in this pham: K1, K6, CT,

Info for manual annotations of cluster CT:
•Start number 17 was manually annotated 31 times for cluster CT.

Info for manual annotations of cluster K1:
•Start number 18 was manually annotated 2 times for cluster K1.
•Start number 20 was manually annotated 5 times for cluster K1.

Info for manual annotations of cluster K6:
•Start number 18 was manually annotated 1 time for cluster K6.
•Start number 20 was manually annotated 12 times for cluster K6.

Gene Information:

Gene: Agatha_56 Start: 39507, Stop: 39274, Start Num: 17
Candidate Starts for Agatha_56:
(Start: 17 @39507 has 31 MA's), (35, 39324),

Gene: AikoCarson_57 Start: 39691, Stop: 39488, Start Num: 17
Candidate Starts for AikoCarson_57:
(7, 39838), (8, 39829), (Start: 17 @39691 has 31 MA's), (19, 39682),

Gene: Amgine_84 Start: 55107, Stop: 55400, Start Num: 20
Candidate Starts for Amgine_84:
(9, 54963), (11, 54990), (12, 54999), (16, 55077), (Start: 20 @55107 has 17 MA's), (21, 55116), (23, 55149), (25, 55164), (36, 55272), (39, 55338),

Gene: Amohnition_82 Start: 54157, Stop: 54450, Start Num: 20
Candidate Starts for Amohnition_82:
(2, 53950), (13, 54061), (14, 54097), (16, 54127), (Start: 20 @54157 has 17 MA's), (23, 54199), (25, 54214), (31, 54271), (36, 54322), (39, 54388),

Gene: Amok_57 Start: 39619, Stop: 39416, Start Num: 17
Candidate Starts for Amok_57:
(Start: 17 @39619 has 31 MA's), (19, 39610),

Gene: AndPeggy_53 Start: 38923, Stop: 38681, Start Num: 17
Candidate Starts for AndPeggy_53:
(Start: 17 @38923 has 31 MA's), (29, 38806),

Gene: Applecrisp_82 Start: 54284, Stop: 54577, Start Num: 20
Candidate Starts for Applecrisp_82:
(9, 54140), (11, 54167), (12, 54176), (16, 54254), (Start: 20 @54284 has 17 MA's), (21, 54293), (23, 54326), (25, 54341), (31, 54398), (36, 54449), (39, 54515),

Gene: Axym_55 Start: 39404, Stop: 39171, Start Num: 17
Candidate Starts for Axym_55:
(Start: 17 @39404 has 31 MA's), (35, 39221),

Gene: BillDoor_56 Start: 38599, Stop: 38357, Start Num: 17
Candidate Starts for BillDoor_56:
(Start: 17 @38599 has 31 MA's), (29, 38482),

Gene: Biskit_58 Start: 39289, Stop: 39083, Start Num: 17
Candidate Starts for Biskit_58:
(Start: 17 @39289 has 31 MA's), (23, 39232),

Gene: Blondies_59 Start: 39606, Stop: 39400, Start Num: 17
Candidate Starts for Blondies_59:
(Start: 17 @39606 has 31 MA's), (23, 39549),

Gene: Bubble_54 Start: 39092, Stop: 38859, Start Num: 17
Candidate Starts for Bubble_54:
(Start: 17 @39092 has 31 MA's), (35, 38909),

Gene: Burnsey_56 Start: 39498, Stop: 39265, Start Num: 17
Candidate Starts for Burnsey_56:
(Start: 17 @39498 has 31 MA's), (35, 39315),

Gene: Buttrmlkdreams_58 Start: 39736, Stop: 39530, Start Num: 17
Candidate Starts for Buttrmlkdreams_58:
(Start: 17 @39736 has 31 MA's), (23, 39679),

Gene: CanesSauce_55 Start: 39084, Stop: 38842, Start Num: 17
Candidate Starts for CanesSauce_55:
(Start: 17 @39084 has 31 MA's), (29, 38967),

Gene: CaramelLatte_55 Start: 39084, Stop: 38842, Start Num: 17
Candidate Starts for CaramelLatte_55:
(Start: 17 @39084 has 31 MA's), (29, 38967),

Gene: Carsonalex_59 Start: 39886, Stop: 39653, Start Num: 17
Candidate Starts for Carsonalex_59:
(Start: 17 @39886 has 31 MA's), (35, 39703),

Gene: ChocoMunchkin_55 Start: 39084, Stop: 38842, Start Num: 17
Candidate Starts for ChocoMunchkin_55:
(Start: 17 @39084 has 31 MA's), (29, 38967),

Gene: Chris_37 Start: 29849, Stop: 30016, Start Num: 20
Candidate Starts for Chris_37:
(3, 29648), (Start: 18 @29843 has 3 MA's), (Start: 20 @29849 has 17 MA's), (26, 29909), (27, 29933), (28, 29945), (31, 29963), (34, 30005),

Gene: Cozz_54 Start: 39095, Stop: 38862, Start Num: 17
Candidate Starts for Cozz_54:
(Start: 17 @39095 has 31 MA's), (35, 38912),

Gene: DarthP_82 Start: 54010, Stop: 54303, Start Num: 20
Candidate Starts for DarthP_82:
(2, 53803), (13, 53914), (14, 53950), (16, 53980), (Start: 20 @54010 has 17 MA's), (23, 54052), (25, 54067), (31, 54124), (36, 54175), (39, 54241),

Gene: Eliott_56 Start: 39391, Stop: 39158, Start Num: 17
Candidate Starts for Eliott_56:
(Start: 17 @39391 has 31 MA's), (22, 39352), (35, 39208),

Gene: Ellie_82 Start: 54275, Stop: 54568, Start Num: 20
Candidate Starts for Ellie_82:
(9, 54131), (11, 54158), (12, 54167), (Start: 20 @54275 has 17 MA's), (21, 54284), (23, 54317), (25, 54332), (32, 54407), (36, 54440), (39, 54506),

Gene: Emalyn_55 Start: 38411, Stop: 38208, Start Num: 17
Candidate Starts for Emalyn_55:
(6, 38561), (7, 38558), (8, 38549), (Start: 17 @38411 has 31 MA's), (19, 38402),

Gene: Fefferhead_84 Start: 54071, Stop: 54364, Start Num: 20
Candidate Starts for Fefferhead_84:
(9, 53927), (11, 53954), (12, 53963), (16, 54041), (Start: 20 @54071 has 17 MA's), (21, 54080), (23, 54113), (25, 54128), (31, 54185), (36, 54236), (39, 54302),

Gene: GoldHunter_56 Start: 39508, Stop: 39275, Start Num: 17
Candidate Starts for GoldHunter_56:
(Start: 17 @39508 has 31 MA's), (35, 39325),

Gene: Hammy_82 Start: 54000, Stop: 54293, Start Num: 20
Candidate Starts for Hammy_82:
(2, 53793), (13, 53904), (14, 53940), (16, 53970), (Start: 20 @54000 has 17 MA's), (23, 54042), (25, 54057), (31, 54114), (36, 54165), (39, 54231),

Gene: Horseradish_58 Start: 39222, Stop: 39016, Start Num: 17
Candidate Starts for Horseradish_58:
(Start: 17 @39222 has 31 MA's), (23, 39165),

Gene: KiSi_38 Start: 29952, Stop: 30125, Start Num: 18
Candidate Starts for KiSi_38:
(3, 29757), (Start: 18 @29952 has 3 MA's), (Start: 20 @29958 has 17 MA's), (25, 30015), (28, 30054), (31, 30072),

Gene: Lavahound_83 Start: 55240, Stop: 55533, Start Num: 20
Candidate Starts for Lavahound_83:
(9, 55096), (11, 55123), (12, 55132), (16, 55210), (Start: 20 @55240 has 17 MA's), (21, 55249), (23, 55282), (25, 55297), (32, 55372), (36, 55405), (39, 55471),

Gene: LeMond_38 Start: 30029, Stop: 30196, Start Num: 20
Candidate Starts for LeMond_38:
(3, 29828), (Start: 18 @30023 has 3 MA's), (Start: 20 @30029 has 17 MA's), (25, 30086), (26, 30089), (27, 30113), (28, 30125),

Gene: MScarn_60 Start: 39404, Stop: 39198, Start Num: 17

Candidate Starts for MScarn_60:
(Start: 17 @39404 has 31 MA's), (23, 39347),

Gene: MarkPhew_39 Start: 29921, Stop: 30088, Start Num: 20
Candidate Starts for MarkPhew_39:
(3, 29720), (Start: 18 @29915 has 3 MA's), (Start: 20 @29921 has 17 MA's), (25, 29978), (26, 29981), (27, 30005), (28, 30017), (31, 30035),

Gene: Marshawn_39 Start: 30328, Stop: 30501, Start Num: 18
Candidate Starts for Marshawn_39:
(Start: 18 @30328 has 3 MA's), (Start: 20 @30334 has 17 MA's), (25, 30391), (26, 30394), (27, 30418), (28, 30430), (31, 30448), (33, 30466),

Gene: MunkgeeRoachy_54 Start: 38854, Stop: 38621, Start Num: 17
Candidate Starts for MunkgeeRoachy_54:
(Start: 17 @38854 has 31 MA's), (35, 38671),

Gene: Nibb_37 Start: 29486, Stop: 29653, Start Num: 20
Candidate Starts for Nibb_37:
(3, 29285), (Start: 18 @29480 has 3 MA's), (Start: 20 @29486 has 17 MA's), (26, 29546), (27, 29570), (28, 29582), (31, 29600),

Gene: Nina_56 Start: 39994, Stop: 39761, Start Num: 17
Candidate Starts for Nina_56:
(Start: 17 @39994 has 31 MA's), (35, 39811),

Gene: Oscar_38 Start: 30025, Stop: 30207, Start Num: 18
Candidate Starts for Oscar_38:
(3, 29830), (Start: 18 @30025 has 3 MA's), (Start: 20 @30031 has 17 MA's), (25, 30088), (26, 30091), (27, 30115), (28, 30127), (30, 30145), (31, 30151), (33, 30172), (34, 30196),

Gene: PsychoKiller_55 Start: 39392, Stop: 39159, Start Num: 17
Candidate Starts for PsychoKiller_55:
(Start: 17 @39392 has 31 MA's), (22, 39353), (35, 39209),

Gene: Quasar_56 Start: 40096, Stop: 39863, Start Num: 17
Candidate Starts for Quasar_56:
(Start: 17 @40096 has 31 MA's), (35, 39913),

Gene: RADical_57 Start: 39386, Stop: 39153, Start Num: 17
Candidate Starts for RADical_57:
(Start: 17 @39386 has 31 MA's), (35, 39203),

Gene: RSchmailzl_57 Start: 39551, Stop: 39318, Start Num: 17
Candidate Starts for RSchmailzl_57:
(15, 39593), (Start: 17 @39551 has 31 MA's), (35, 39368),

Gene: RedBaron_62 Start: 40469, Stop: 40236, Start Num: 17
Candidate Starts for RedBaron_62:
(Start: 17 @40469 has 31 MA's), (35, 40286),

Gene: Scarlett_38 Start: 30031, Stop: 30198, Start Num: 20
Candidate Starts for Scarlett_38:

(3, 29830), (Start: 18 @30025 has 3 MA's), (Start: 20 @30031 has 17 MA's), (25, 30088), (28, 30127), (31, 30145),

Gene: SketchMex_56 Start: 39289, Stop: 39083, Start Num: 17
Candidate Starts for SketchMex_56:
(Start: 17 @39289 has 31 MA's), (23, 39232),

Gene: Socotra_57 Start: 39504, Stop: 39271, Start Num: 17
Candidate Starts for Socotra_57:
(Start: 17 @39504 has 31 MA's), (35, 39321),

Gene: Sopespian_54 Start: 39393, Stop: 39160, Start Num: 17
Candidate Starts for Sopespian_54:
(Start: 17 @39393 has 31 MA's), (22, 39354), (35, 39210),

Gene: Starburst_56 Start: 39388, Stop: 39155, Start Num: 17
Candidate Starts for Starburst_56:
(Start: 17 @39388 has 31 MA's), (35, 39205),

Gene: SteamedHams_57 Start: 38900, Stop: 38658, Start Num: 17
Candidate Starts for SteamedHams_57:
(Start: 17 @38900 has 31 MA's), (29, 38783),

Gene: Sunflower1121_89 Start: 54079, Stop: 54279, Start Num: 20
Candidate Starts for Sunflower1121_89:
(5, 53911), (11, 53959), (12, 53968), (14, 54016), (16, 54046), (Start: 20 @54079 has 17 MA's), (23, 54121), (25, 54136), (31, 54193), (38, 54274),

Gene: SweatNTears_58 Start: 39635, Stop: 39402, Start Num: 17
Candidate Starts for SweatNTears_58:
(Start: 17 @39635 has 31 MA's), (35, 39452),

Gene: Tierra_91 Start: 55336, Stop: 55536, Start Num: 20
Candidate Starts for Tierra_91:
(1, 55108), (4, 55150), (10, 55198), (Start: 20 @55336 has 17 MA's), (23, 55378), (25, 55393), (31, 55450),

Gene: Tolls_57 Start: 39171, Stop: 38929, Start Num: 17
Candidate Starts for Tolls_57:
(Start: 17 @39171 has 31 MA's), (29, 39054),

Gene: Troje_58 Start: 39627, Stop: 39421, Start Num: 17
Candidate Starts for Troje_58:
(Start: 17 @39627 has 31 MA's), (23, 39570),

Gene: Typhonomachy_55 Start: 39217, Stop: 38984, Start Num: 17
Candidate Starts for Typhonomachy_55:
(Start: 17 @39217 has 31 MA's), (35, 39034),

Gene: Unicorn_91 Start: 55047, Stop: 55247, Start Num: 20
Candidate Starts for Unicorn_91:
(1, 54831), (4, 54873), (10, 54921), (Start: 20 @55047 has 17 MA's), (23, 55089), (25, 55104), (31, 55161), (38, 55242),

Gene: Yarn_53 Start: 38928, Stop: 38686, Start Num: 17
Candidate Starts for Yarn_53:
(Start: 17 @38928 has 31 MA's), (29, 38811),

Gene: Yummy_58 Start: 39336, Stop: 39130, Start Num: 17
Candidate Starts for Yummy_58:
(Start: 17 @39336 has 31 MA's), (23, 39279),

Gene: Yuna_87 Start: 55563, Stop: 55775, Start Num: 20
Candidate Starts for Yuna_87:
(2, 55356), (11, 55446), (12, 55455), (14, 55503), (16, 55533), (Start: 20 @55563 has 17 MA's), (23, 55605), (24, 55611), (25, 55620), (28, 55659), (29, 55665), (31, 55677), (37, 55749),