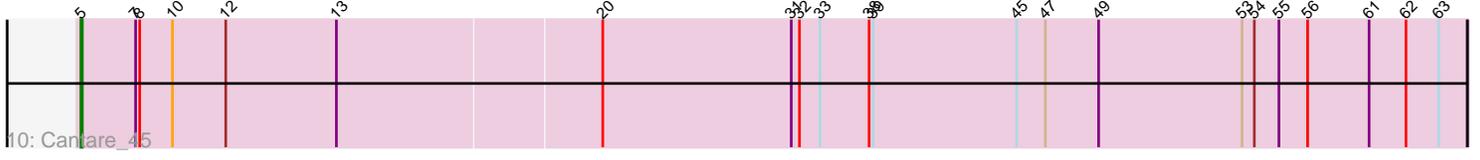
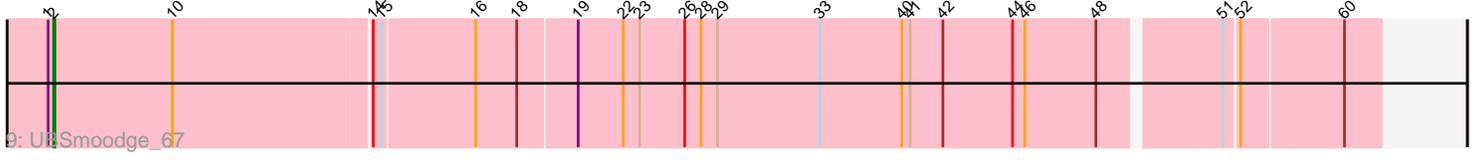
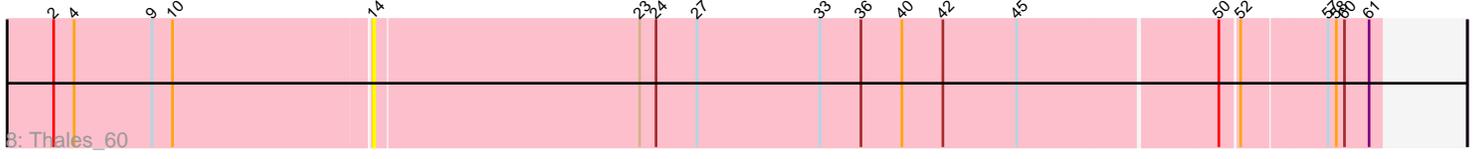
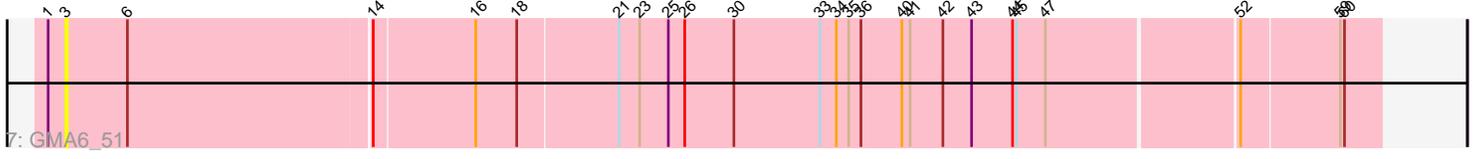
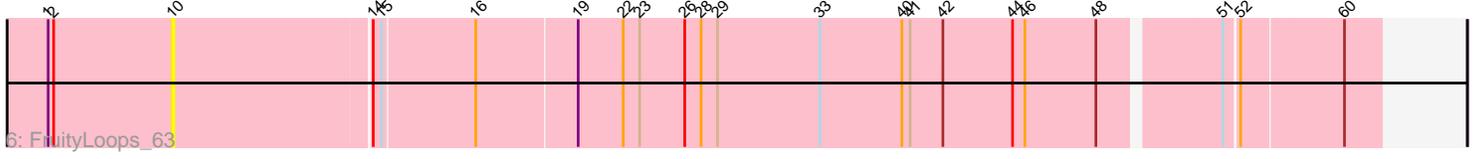
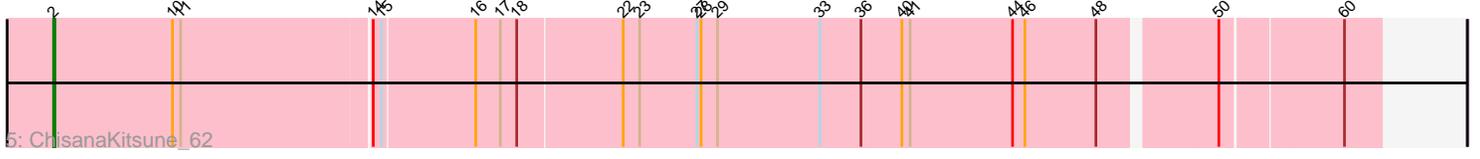
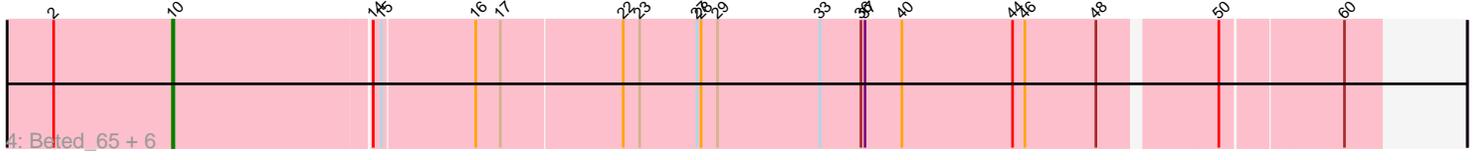
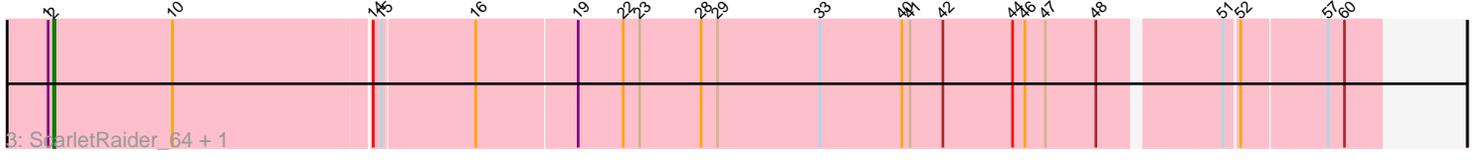
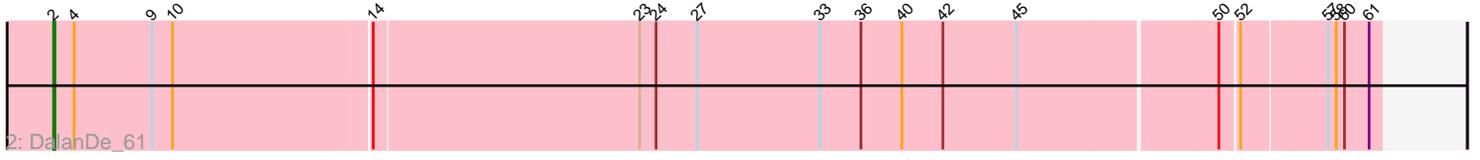
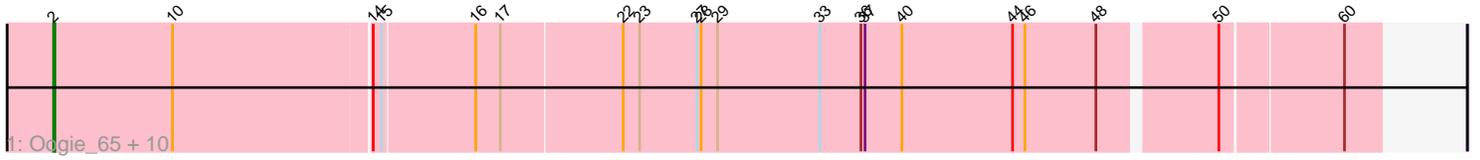


Pham 291438



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 291438 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291438 has 27 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Oogie_65, Alok_i_63, Gray_66, Argena_63, Toneprano_63, Schomber_64, Amoonguss_63, MintFritos_63, EmoNemo_63, Pakusa_63, Kabocha_67
- Track 2 : DalanDe_61
- Track 3 : ScarletRaider_64, FlyingTortilla_65
- Track 4 : Beted_65, Mikronejon_63, Chidiebere_66, Hanem_65, Lenoshki_65, Farrylious_63, Twin_63
- Track 5 : ChisanaKitsune_62
- Track 6 : FruityLoops_63
- Track 7 : GMA6_51
- Track 8 : Thales_60
- Track 9 : UBSmoodge_67
- Track 10 : Cantare_45

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

The start number called the most often in the published annotations is 2, it was called in 8 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alok_i_63, Amoonguss_63, Argena_63, ChisanaKitsune_62, DalanDe_61, EmoNemo_63, FlyingTortilla_65, Gray_66, Kabocha_67, MintFritos_63, Oogie_65, Pakusa_63, ScarletRaider_64, Schomber_64, Toneprano_63, UBSmoodge_67,

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

- Beted_65, Chidiebere_66, Farrylious_63, FruityLoops_63, Hanem_65, Lenoshki_65, Mikronejon_63, Thales_60, Twin_63,

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

- Cantare_45, GMA6_51,

Summary by start number:

Start 2:

- Found in 25 of 27 (92.6%) of genes in pham

- Manual Annotations of this start: 8 of 11
- Called 64.0% of time when present
- Phage (with cluster) where this start called: Aloki_63 (DQ), Amoonguss_63 (DQ), Argena_63 (DQ), ChisanaKitsune_62 (DQ), DalanDe_61 (DQ), EmoNemo_63 (DQ), FlyingTortilla_65 (DQ), Gray_66 (DQ), Kabocha_67 (DQ), MintFritos_63 (DQ), Oogie_65 (DQ), Pakusa_63 (DQ), ScarletRaider_64 (DQ), Schomber_64 (DQ), Toneprano_63 (DQ), UBSmoodge_67 (DQ),

Start 3:

- Found in 1 of 27 (3.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6_51 (DQ),

Start 5:

- Found in 1 of 27 (3.7%) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare_45 (singleton),

Start 10:

- Found in 26 of 27 (96.3%) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 30.8% of time when present
- Phage (with cluster) where this start called: Beted_65 (DQ), Chidiebere_66 (DQ), Farrylous_63 (DQ), FruityLoops_63 (DQ), Hanem_65 (DQ), Lenoshki_65 (DQ), Mikronejon_63 (DQ), Twin_63 (DQ),

Start 14:

- Found in 26 of 27 (96.3%) of genes in pham
- No Manual Annotations of this start.
- Called 3.8% of time when present
- Phage (with cluster) where this start called: Thales_60 (DQ),

Summary by clusters:

There are 2 clusters represented in this pham: singleton, DQ,

Info for manual annotations of cluster DQ:

- Start number 2 was manually annotated 8 times for cluster DQ.
- Start number 10 was manually annotated 2 times for cluster DQ.

Gene Information:

Gene: Aloki_63 Start: 52730, Stop: 51792, Start Num: 2

Candidate Starts for Aloki_63:

(Start: 2 @52730 has 8 MA's), (Start: 10 @52643 has 2 MA's), (14, 52502), (15, 52496), (16, 52430), (17, 52412), (22, 52325), (23, 52313), (27, 52271), (28, 52268), (29, 52256), (33, 52181), (36, 52151), (37, 52148), (40, 52121), (44, 52040), (46, 52031), (48, 51980), (50, 51902), (60, 51818),

Gene: Amoonguss_63 Start: 52733, Stop: 51795, Start Num: 2

Candidate Starts for Amoonguss_63:

(Start: 2 @52733 has 8 MA's), (Start: 10 @52646 has 2 MA's), (14, 52505), (15, 52499), (16, 52433), (17, 52415), (22, 52328), (23, 52316), (27, 52274), (28, 52271), (29, 52259), (33, 52184), (36, 52154), (37, 52151), (40, 52124), (44, 52043), (46, 52034), (48, 51983), (50, 51905), (60, 51821),

Gene: Argena_63 Start: 52745, Stop: 51807, Start Num: 2

Candidate Starts for Argena_63:

(Start: 2 @52745 has 8 MA's), (Start: 10 @52658 has 2 MA's), (14, 52517), (15, 52511), (16, 52445), (17, 52427), (22, 52340), (23, 52328), (27, 52286), (28, 52283), (29, 52271), (33, 52196), (36, 52166), (37, 52163), (40, 52136), (44, 52055), (46, 52046), (48, 51995), (50, 51917), (60, 51833),

Gene: Beted_65 Start: 54338, Stop: 53487, Start Num: 10

Candidate Starts for Beted_65:

(Start: 2 @54425 has 8 MA's), (Start: 10 @54338 has 2 MA's), (14, 54197), (15, 54191), (16, 54125), (17, 54107), (22, 54020), (23, 54008), (27, 53966), (28, 53963), (29, 53951), (33, 53876), (36, 53846), (37, 53843), (40, 53816), (44, 53735), (46, 53726), (48, 53675), (50, 53597), (60, 53513),

Gene: Cantare_45 Start: 41518, Stop: 40511, Start Num: 5

Candidate Starts for Cantare_45:

(Start: 5 @41518 has 1 MA's), (7, 41479), (8, 41476), (Start: 10 @41452 has 2 MA's), (12, 41413), (13, 41332), (20, 41143), (31, 41005), (32, 40999), (33, 40984), (38, 40948), (39, 40945), (45, 40840), (47, 40819), (49, 40780), (53, 40675), (54, 40666), (55, 40648), (56, 40627), (61, 40582), (62, 40555), (63, 40531),

Gene: Chidiebere_66 Start: 53174, Stop: 52323, Start Num: 10

Candidate Starts for Chidiebere_66:

(Start: 2 @53261 has 8 MA's), (Start: 10 @53174 has 2 MA's), (14, 53033), (15, 53027), (16, 52961), (17, 52943), (22, 52856), (23, 52844), (27, 52802), (28, 52799), (29, 52787), (33, 52712), (36, 52682), (37, 52679), (40, 52652), (44, 52571), (46, 52562), (48, 52511), (50, 52433), (60, 52349),

Gene: ChisanaKitsune_62 Start: 52034, Stop: 51096, Start Num: 2

Candidate Starts for ChisanaKitsune_62:

(Start: 2 @52034 has 8 MA's), (Start: 10 @51947 has 2 MA's), (11, 51941), (14, 51806), (15, 51800), (16, 51734), (17, 51716), (18, 51704), (22, 51629), (23, 51617), (27, 51575), (28, 51572), (29, 51560), (33, 51485), (36, 51455), (40, 51425), (41, 51419), (44, 51344), (46, 51335), (48, 51284), (50, 51206), (60, 51122),

Gene: DalanDe_61 Start: 55926, Stop: 54979, Start Num: 2

Candidate Starts for DalanDe_61:

(Start: 2 @55926 has 8 MA's), (4, 55911), (9, 55854), (Start: 10 @55839 has 2 MA's), (14, 55698), (23, 55506), (24, 55494), (27, 55464), (33, 55374), (36, 55344), (40, 55314), (42, 55284), (45, 55230), (50, 55089), (52, 55077), (57, 55017), (58, 55011), (60, 55005), (61, 54987),

Gene: EmoNemo_63 Start: 52730, Stop: 51792, Start Num: 2

Candidate Starts for EmoNemo_63:

(Start: 2 @52730 has 8 MA's), (Start: 10 @52643 has 2 MA's), (14, 52502), (15, 52496), (16, 52430), (17, 52412), (22, 52325), (23, 52313), (27, 52271), (28, 52268), (29, 52256), (33, 52181), (36, 52151), (37, 52148), (40, 52121), (44, 52040), (46, 52031), (48, 51980), (50, 51902), (60, 51818),

Gene: Farrylious_63 Start: 52422, Stop: 51571, Start Num: 10

Candidate Starts for Farrylious_63:

(Start: 2 @52509 has 8 MA's), (Start: 10 @52422 has 2 MA's), (14, 52281), (15, 52275), (16, 52209), (17, 52191), (22, 52104), (23, 52092), (27, 52050), (28, 52047), (29, 52035), (33, 51960), (36, 51930),

(37, 51927), (40, 51900), (44, 51819), (46, 51810), (48, 51759), (50, 51681), (60, 51597),

Gene: FlyingTortilla_65 Start: 56355, Stop: 55417, Start Num: 2

Candidate Starts for FlyingTortilla_65:

(1, 56358), (Start: 2 @56355 has 8 MA's), (Start: 10 @56268 has 2 MA's), (14, 56127), (15, 56121), (16, 56055), (19, 55983), (22, 55950), (23, 55938), (28, 55893), (29, 55881), (33, 55806), (40, 55746), (41, 55740), (42, 55716), (44, 55665), (46, 55656), (47, 55641), (48, 55605), (51, 55524), (52, 55515), (57, 55455), (60, 55443),

Gene: FruityLoops_63 Start: 55573, Stop: 54722, Start Num: 10

Candidate Starts for FruityLoops_63:

(1, 55663), (Start: 2 @55660 has 8 MA's), (Start: 10 @55573 has 2 MA's), (14, 55432), (15, 55426), (16, 55360), (19, 55288), (22, 55255), (23, 55243), (26, 55210), (28, 55198), (29, 55186), (33, 55111), (40, 55051), (41, 55045), (42, 55021), (44, 54970), (46, 54961), (48, 54910), (51, 54829), (52, 54820), (60, 54748),

Gene: GMA6_51 Start: 44602, Stop: 43667, Start Num: 3

Candidate Starts for GMA6_51:

(1, 44614), (3, 44602), (6, 44557), (14, 44383), (16, 44311), (18, 44281), (21, 44209), (23, 44194), (25, 44173), (26, 44161), (30, 44125), (33, 44062), (34, 44050), (35, 44041), (36, 44032), (40, 44002), (41, 43996), (42, 43972), (43, 43951), (44, 43921), (45, 43918), (47, 43897), (52, 43765), (59, 43696), (60, 43693),

Gene: Gray_66 Start: 53261, Stop: 52323, Start Num: 2

Candidate Starts for Gray_66:

(Start: 2 @53261 has 8 MA's), (Start: 10 @53174 has 2 MA's), (14, 53033), (15, 53027), (16, 52961), (17, 52943), (22, 52856), (23, 52844), (27, 52802), (28, 52799), (29, 52787), (33, 52712), (36, 52682), (37, 52679), (40, 52652), (44, 52571), (46, 52562), (48, 52511), (50, 52433), (60, 52349),

Gene: Hanem_65 Start: 52643, Stop: 51792, Start Num: 10

Candidate Starts for Hanem_65:

(Start: 2 @52730 has 8 MA's), (Start: 10 @52643 has 2 MA's), (14, 52502), (15, 52496), (16, 52430), (17, 52412), (22, 52325), (23, 52313), (27, 52271), (28, 52268), (29, 52256), (33, 52181), (36, 52151), (37, 52148), (40, 52121), (44, 52040), (46, 52031), (48, 51980), (50, 51902), (60, 51818),

Gene: Kabocha_67 Start: 54073, Stop: 53135, Start Num: 2

Candidate Starts for Kabocha_67:

(Start: 2 @54073 has 8 MA's), (Start: 10 @53986 has 2 MA's), (14, 53845), (15, 53839), (16, 53773), (17, 53755), (22, 53668), (23, 53656), (27, 53614), (28, 53611), (29, 53599), (33, 53524), (36, 53494), (37, 53491), (40, 53464), (44, 53383), (46, 53374), (48, 53323), (50, 53245), (60, 53161),

Gene: Lenoshki_65 Start: 54338, Stop: 53487, Start Num: 10

Candidate Starts for Lenoshki_65:

(Start: 2 @54425 has 8 MA's), (Start: 10 @54338 has 2 MA's), (14, 54197), (15, 54191), (16, 54125), (17, 54107), (22, 54020), (23, 54008), (27, 53966), (28, 53963), (29, 53951), (33, 53876), (36, 53846), (37, 53843), (40, 53816), (44, 53735), (46, 53726), (48, 53675), (50, 53597), (60, 53513),

Gene: Mikronejon_63 Start: 52643, Stop: 51792, Start Num: 10

Candidate Starts for Mikronejon_63:

(Start: 2 @52730 has 8 MA's), (Start: 10 @52643 has 2 MA's), (14, 52502), (15, 52496), (16, 52430), (17, 52412), (22, 52325), (23, 52313), (27, 52271), (28, 52268), (29, 52256), (33, 52181), (36, 52151), (37, 52148), (40, 52121), (44, 52040), (46, 52031), (48, 51980), (50, 51902), (60, 51818),

Gene: MintFritos_63 Start: 52731, Stop: 51793, Start Num: 2

Candidate Starts for MintFritos_63:

(Start: 2 @52731 has 8 MA's), (Start: 10 @52644 has 2 MA's), (14, 52503), (15, 52497), (16, 52431), (17, 52413), (22, 52326), (23, 52314), (27, 52272), (28, 52269), (29, 52257), (33, 52182), (36, 52152), (37, 52149), (40, 52122), (44, 52041), (46, 52032), (48, 51981), (50, 51903), (60, 51819),

Gene: Oogie_65 Start: 54451, Stop: 53513, Start Num: 2

Candidate Starts for Oogie_65:

(Start: 2 @54451 has 8 MA's), (Start: 10 @54364 has 2 MA's), (14, 54223), (15, 54217), (16, 54151), (17, 54133), (22, 54046), (23, 54034), (27, 53992), (28, 53989), (29, 53977), (33, 53902), (36, 53872), (37, 53869), (40, 53842), (44, 53761), (46, 53752), (48, 53701), (50, 53623), (60, 53539),

Gene: Pakusa_63 Start: 52472, Stop: 51534, Start Num: 2

Candidate Starts for Pakusa_63:

(Start: 2 @52472 has 8 MA's), (Start: 10 @52385 has 2 MA's), (14, 52244), (15, 52238), (16, 52172), (17, 52154), (22, 52067), (23, 52055), (27, 52013), (28, 52010), (29, 51998), (33, 51923), (36, 51893), (37, 51890), (40, 51863), (44, 51782), (46, 51773), (48, 51722), (50, 51644), (60, 51560),

Gene: ScarletRaider_64 Start: 55642, Stop: 54704, Start Num: 2

Candidate Starts for ScarletRaider_64:

(1, 55645), (Start: 2 @55642 has 8 MA's), (Start: 10 @55555 has 2 MA's), (14, 55414), (15, 55408), (16, 55342), (19, 55270), (22, 55237), (23, 55225), (28, 55180), (29, 55168), (33, 55093), (40, 55033), (41, 55027), (42, 55003), (44, 54952), (46, 54943), (47, 54928), (48, 54892), (51, 54811), (52, 54802), (57, 54742), (60, 54730),

Gene: Schomber_64 Start: 52480, Stop: 51542, Start Num: 2

Candidate Starts for Schomber_64:

(Start: 2 @52480 has 8 MA's), (Start: 10 @52393 has 2 MA's), (14, 52252), (15, 52246), (16, 52180), (17, 52162), (22, 52075), (23, 52063), (27, 52021), (28, 52018), (29, 52006), (33, 51931), (36, 51901), (37, 51898), (40, 51871), (44, 51790), (46, 51781), (48, 51730), (50, 51652), (60, 51568),

Gene: Thales_60 Start: 54613, Stop: 53894, Start Num: 14

Candidate Starts for Thales_60:

(Start: 2 @54841 has 8 MA's), (4, 54826), (9, 54769), (Start: 10 @54754 has 2 MA's), (14, 54613), (23, 54421), (24, 54409), (27, 54379), (33, 54289), (36, 54259), (40, 54229), (42, 54199), (45, 54145), (50, 54004), (52, 53992), (57, 53932), (58, 53926), (60, 53920), (61, 53902),

Gene: Toneprano_63 Start: 52745, Stop: 51807, Start Num: 2

Candidate Starts for Toneprano_63:

(Start: 2 @52745 has 8 MA's), (Start: 10 @52658 has 2 MA's), (14, 52517), (15, 52511), (16, 52445), (17, 52427), (22, 52340), (23, 52328), (27, 52286), (28, 52283), (29, 52271), (33, 52196), (36, 52166), (37, 52163), (40, 52136), (44, 52055), (46, 52046), (48, 51995), (50, 51917), (60, 51833),

Gene: Twin_63 Start: 52643, Stop: 51792, Start Num: 10

Candidate Starts for Twin_63:

(Start: 2 @52730 has 8 MA's), (Start: 10 @52643 has 2 MA's), (14, 52502), (15, 52496), (16, 52430), (17, 52412), (22, 52325), (23, 52313), (27, 52271), (28, 52268), (29, 52256), (33, 52181), (36, 52151), (37, 52148), (40, 52121), (44, 52040), (46, 52031), (48, 51980), (50, 51902), (60, 51818),

Gene: UBSmoodge_67 Start: 56124, Stop: 55186, Start Num: 2

Candidate Starts for UBSmoodge_67:

(1, 56127), (Start: 2 @56124 has 8 MA's), (Start: 10 @56037 has 2 MA's), (14, 55896), (15, 55890), (16, 55824), (18, 55794), (19, 55752), (22, 55719), (23, 55707), (26, 55674), (28, 55662), (29, 55650),

(33, 55575), (40, 55515), (41, 55509), (42, 55485), (44, 55434), (46, 55425), (48, 55374), (51, 55293),
(52, 55284), (60, 55212),