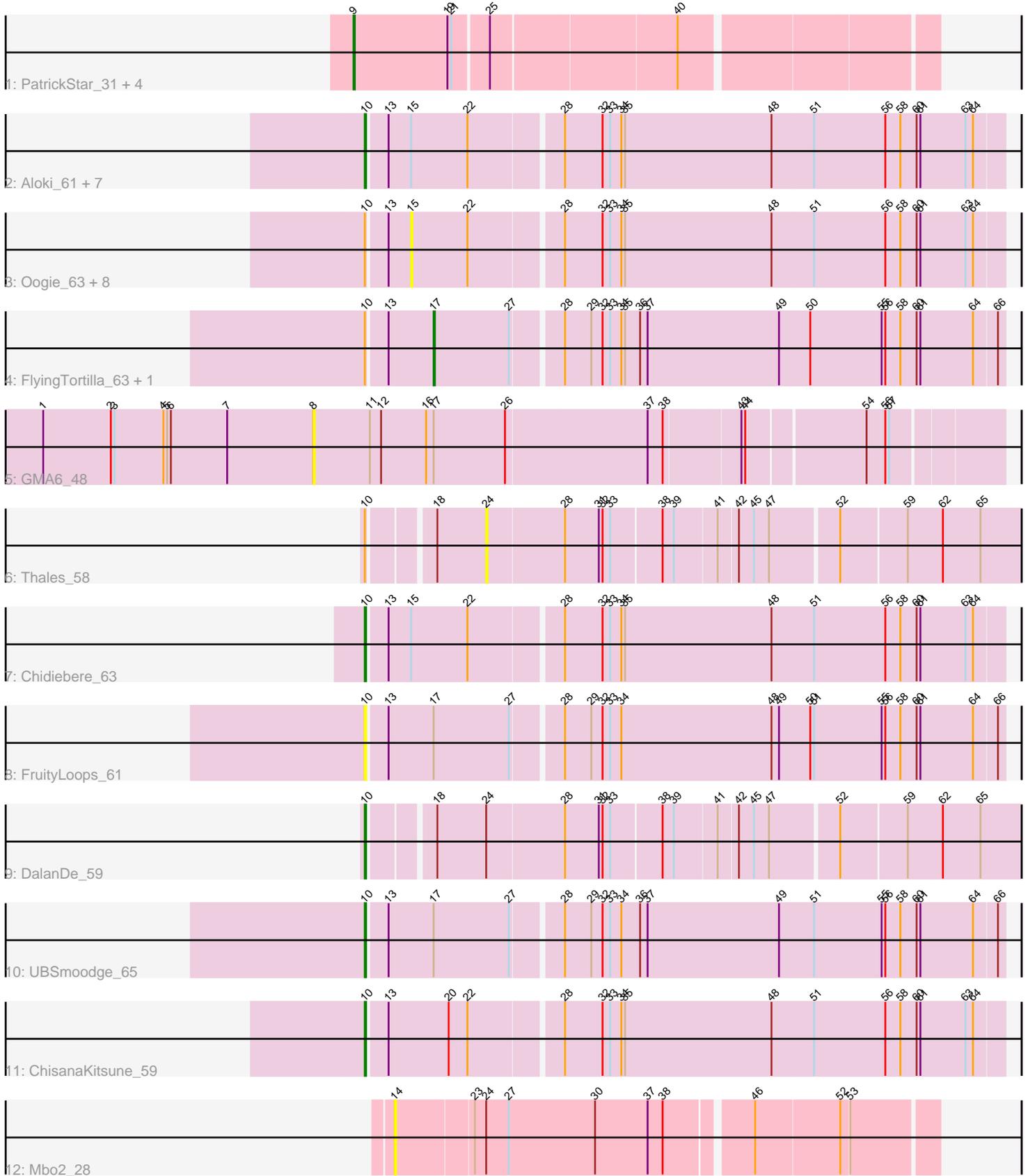# Pham 284045

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 284045 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284045 has 32 members, 17 are drafts.

Phages represented in each track:
• Track 1 : PatrickStar_31, Orchid_31, RobinSparkles_34, Kampe_31, Gibbles_30
• Track 2 : Aloki_61, Gray_63, EmoNemo_61, Schomber_62, MintFritos_61, Hanem_63, Farrylious_61, Kabocha_64
• Track 3 : Oogie_63, Argena_61, Toneprano_61, Beted_63, Mikronejon_61, Amoonguss_61, Pakusa_61, Lenoshki_63, Twin_61
• Track 4 : FlyingTortilla_63, ScarletRaider_62
• Track 5 : GMA6_48
• Track 6 : Thales_58
• Track 7 : Chidiebere_63
• Track 8 : FruityLoops_61
• Track 9 : DalanDe_59
• Track 10 : UBSmoodge_65
• Track 11 : ChisanaKitsune_59
• Track 12 : Mbo2_28

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

The start number called the most often in the published annotations is 10, it was called in 8 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aloki_61, Chidiebere_63, ChisanaKitsune_59, DalanDe_59, EmoNemo_61, Farrylious_61, FruityLoops_61, Gray_63, Hanem_63, Kabocha_64, MintFritos_61, Schomber_62, UBSmoodge_65,

Genes that have the "Most Annotated" start but do not call it:
• Amoonguss_61, Argena_61, Beted_63, FlyingTortilla_63, Lenoshki_63, Mikronejon_61, Oogie_63, Pakusa_61, ScarletRaider_62, Thales_58, Toneprano_61, Twin_61,

Genes that do not have the "Most Annotated" start:
• GMA6_48, Gibbles_30, Kampe_31, Mbo2_28, Orchid_31, PatrickStar_31, RobinSparkles_34,

Summary by start number:

Start 8:
• Found in 1 of 32 (3.1%) 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_48 (DQ),

Start 9:
• Found in 5 of 32 (15.6%) of genes in pham
• Manual Annotations of this start: 5 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gibbles_30 (CX), Kampe_31 (CX), Orchid_31 (CX), PatrickStar_31 (CX), RobinSparkles_34 (CX),

Start 10:
• Found in 25 of 32 (78.1%) of genes in pham
• Manual Annotations of this start: 8 of 15
• Called 52.0% of time when present
• Phage (with cluster) where this start called: Aloki_61 (DQ), Chidiebere_63 (DQ), ChisanaKitsune_59 (DQ), DalanDe_59 (DQ), EmoNemo_61 (DQ), Farrylious_61 (DQ), FruityLoops_61 (DQ), Gray_63 (DQ), Hanem_63 (DQ), Kabocha_64 (DQ), MintFritos_61 (DQ), Schomber_62 (DQ), UBSmoodge_65 (DQ),

Start 14:
• Found in 1 of 32 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mbo2_28 (singleton),

Start 15:
• Found in 18 of 32 (56.2%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Amoonguss_61 (DQ), Argena_61 (DQ), Beted_63 (DQ), Lenoshki_63 (DQ), Mikronejon_61 (DQ), Oogie_63 (DQ), Pakusa_61 (DQ), Toneprano_61 (DQ), Twin_61 (DQ),

Start 17:
• Found in 5 of 32 (15.6%) of genes in pham
• Manual Annotations of this start: 2 of 15
• Called 40.0% of time when present
• Phage (with cluster) where this start called: FlyingTortilla_63 (DQ), ScarletRaider_62 (DQ),

Start 24:
• Found in 3 of 32 (9.4%) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Thales_58 (DQ),

Summary by clusters:

There are 3 clusters represented in this pham: singleton, CX, DQ,

Info for manual annotations of cluster CX:
•Start number 9 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster DQ:
•Start number 10 was manually annotated 8 times for cluster DQ.
•Start number 17 was manually annotated 2 times for cluster DQ.

Gene Information:

Gene: Aloki_61 Start: 50870, Stop: 51364, Start Num: 10
Candidate Starts for Aloki_61:
(Start: 10 @50870 has 8 MA's), (13, 50885), (15, 50903), (22, 50948), (28, 51017), (32, 51047), (33, 51053), (34, 51062), (35, 51065), (48, 51182), (51, 51215), (56, 51272), (58, 51284), (60, 51296), (61, 51299), (63, 51335), (64, 51341),

Gene: Amoonguss_61 Start: 50906, Stop: 51367, Start Num: 15
Candidate Starts for Amoonguss_61:
(Start: 10 @50873 has 8 MA's), (13, 50888), (15, 50906), (22, 50951), (28, 51020), (32, 51050), (33, 51056), (34, 51065), (35, 51068), (48, 51185), (51, 51218), (56, 51275), (58, 51287), (60, 51299), (61, 51302), (63, 51338), (64, 51344),

Gene: Argena_61 Start: 50918, Stop: 51379, Start Num: 15
Candidate Starts for Argena_61:
(Start: 10 @50885 has 8 MA's), (13, 50900), (15, 50918), (22, 50963), (28, 51032), (32, 51062), (33, 51068), (34, 51077), (35, 51080), (48, 51197), (51, 51230), (56, 51287), (58, 51299), (60, 51311), (61, 51314), (63, 51350), (64, 51356),

Gene: Beted_63 Start: 52598, Stop: 53059, Start Num: 15
Candidate Starts for Beted_63:
(Start: 10 @52565 has 8 MA's), (13, 52580), (15, 52598), (22, 52643), (28, 52712), (32, 52742), (33, 52748), (34, 52757), (35, 52760), (48, 52877), (51, 52910), (56, 52967), (58, 52979), (60, 52991), (61, 52994), (63, 53030), (64, 53036),

Gene: Chidiebere_63 Start: 50871, Stop: 51365, Start Num: 10
Candidate Starts for Chidiebere_63:
(Start: 10 @50871 has 8 MA's), (13, 50886), (15, 50904), (22, 50949), (28, 51018), (32, 51048), (33, 51054), (34, 51063), (35, 51066), (48, 51183), (51, 51216), (56, 51273), (58, 51285), (60, 51297), (61, 51300), (63, 51336), (64, 51342),

Gene: ChisanaKitsune_59 Start: 49664, Stop: 50158, Start Num: 10
Candidate Starts for ChisanaKitsune_59:
(Start: 10 @49664 has 8 MA's), (13, 49679), (20, 49727), (22, 49742), (28, 49811), (32, 49841), (33, 49847), (34, 49856), (35, 49859), (48, 49976), (51, 50009), (56, 50066), (58, 50078), (60, 50090), (61, 50093), (63, 50129), (64, 50135),

Gene: DalanDe_59 Start: 54080, Stop: 54571, Start Num: 10
Candidate Starts for DalanDe_59:
(Start: 10 @54080 has 8 MA's), (18, 54125), (24, 54164), (28, 54224), (31, 54251), (32, 54254), (33, 54260), (38, 54299), (39, 54308), (41, 54341), (42, 54356), (45, 54368), (47, 54380), (52, 54431), (59,

54482), (62, 54509), (65, 54539),

Gene: EmoNemo_61 Start: 50870, Stop: 51364, Start Num: 10
Candidate Starts for EmoNemo_61:
(Start: 10 @50870 has 8 MA's), (13, 50885), (15, 50903), (22, 50948), (28, 51017), (32, 51047), (33, 51053), (34, 51062), (35, 51065), (48, 51182), (51, 51215), (56, 51272), (58, 51284), (60, 51296), (61, 51299), (63, 51335), (64, 51341),

Gene: Farrylious_61 Start: 50649, Stop: 51143, Start Num: 10
Candidate Starts for Farrylious_61:
(Start: 10 @50649 has 8 MA's), (13, 50664), (15, 50682), (22, 50727), (28, 50796), (32, 50826), (33, 50832), (34, 50841), (35, 50844), (48, 50961), (51, 50994), (56, 51051), (58, 51063), (60, 51075), (61, 51078), (63, 51114), (64, 51120),

Gene: FlyingTortilla_63 Start: 54543, Stop: 54986, Start Num: 17
Candidate Starts for FlyingTortilla_63:
(Start: 10 @54492 has 8 MA's), (13, 54507), (Start: 17 @54543 has 2 MA's), (27, 54603), (28, 54639), (29, 54660), (32, 54669), (33, 54675), (34, 54684), (35, 54687), (36, 54699), (37, 54705), (49, 54810), (50, 54834), (55, 54891), (56, 54894), (58, 54906), (60, 54918), (61, 54921), (64, 54963), (66, 54981),

Gene: FruityLoops_61 Start: 53797, Stop: 54291, Start Num: 10
Candidate Starts for FruityLoops_61:
(Start: 10 @53797 has 8 MA's), (13, 53812), (Start: 17 @53848 has 2 MA's), (27, 53908), (28, 53944), (29, 53965), (32, 53974), (33, 53980), (34, 53989), (48, 54109), (49, 54115), (50, 54139), (51, 54142), (55, 54196), (56, 54199), (58, 54211), (60, 54223), (61, 54226), (64, 54268), (66, 54286),

Gene: GMA6_48 Start: 42191, Stop: 42718, Start Num: 8
Candidate Starts for GMA6_48:
(1, 41975), (2, 42029), (3, 42032), (4, 42071), (5, 42074), (6, 42077), (7, 42122), (8, 42191), (11, 42236), (12, 42245), (16, 42281), (Start: 17 @42287 has 2 MA's), (26, 42344), (37, 42455), (38, 42467), (43, 42524), (44, 42527), (54, 42617), (56, 42632), (57, 42635),

Gene: Gibbles_30 Start: 35671, Stop: 36108, Start Num: 9
Candidate Starts for Gibbles_30:
(Start: 9 @35671 has 5 MA's), (19, 35746), (21, 35749), (25, 35776), (40, 35917),

Gene: Gray_63 Start: 50871, Stop: 51365, Start Num: 10
Candidate Starts for Gray_63:
(Start: 10 @50871 has 8 MA's), (13, 50886), (15, 50904), (22, 50949), (28, 51018), (32, 51048), (33, 51054), (34, 51063), (35, 51066), (48, 51183), (51, 51216), (56, 51273), (58, 51285), (60, 51297), (61, 51300), (63, 51336), (64, 51342),

Gene: Hanem_63 Start: 50870, Stop: 51364, Start Num: 10
Candidate Starts for Hanem_63:
(Start: 10 @50870 has 8 MA's), (13, 50885), (15, 50903), (22, 50948), (28, 51017), (32, 51047), (33, 51053), (34, 51062), (35, 51065), (48, 51182), (51, 51215), (56, 51272), (58, 51284), (60, 51296), (61, 51299), (63, 51335), (64, 51341),

Gene: Kabocha_64 Start: 51683, Stop: 52177, Start Num: 10
Candidate Starts for Kabocha_64:
(Start: 10 @51683 has 8 MA's), (13, 51698), (15, 51716), (22, 51761), (28, 51830), (32, 51860), (33, 51866), (34, 51875), (35, 51878), (48, 51995), (51, 52028), (56, 52085), (58, 52097), (60, 52109), (61, 52112), (63, 52148), (64, 52154),

Gene: Kampe_31 Start: 35532, Stop: 35969, Start Num: 9
Candidate Starts for Kampe_31:
(Start: 9 @35532 has 5 MA's), (19, 35607), (21, 35610), (25, 35637), (40, 35778),

Gene: Lenoshki_63 Start: 52598, Stop: 53059, Start Num: 15
Candidate Starts for Lenoshki_63:
(Start: 10 @52565 has 8 MA's), (13, 52580), (15, 52598), (22, 52643), (28, 52712), (32, 52742), (33, 52748), (34, 52757), (35, 52760), (48, 52877), (51, 52910), (56, 52967), (58, 52979), (60, 52991), (61, 52994), (63, 53030), (64, 53036),

Gene: Mbo2_28 Start: 29361, Stop: 29771, Start Num: 14
Candidate Starts for Mbo2_28:
(14, 29361), (23, 29421), (24, 29430), (27, 29448), (30, 29517), (37, 29559), (38, 29571), (46, 29634), (52, 29700), (53, 29706),

Gene: Mikronejon_61 Start: 50903, Stop: 51364, Start Num: 15
Candidate Starts for Mikronejon_61:
(Start: 10 @50870 has 8 MA's), (13, 50885), (15, 50903), (22, 50948), (28, 51017), (32, 51047), (33, 51053), (34, 51062), (35, 51065), (48, 51182), (51, 51215), (56, 51272), (58, 51284), (60, 51296), (61, 51299), (63, 51335), (64, 51341),

Gene: MintFritos_61 Start: 50871, Stop: 51365, Start Num: 10
Candidate Starts for MintFritos_61:
(Start: 10 @50871 has 8 MA's), (13, 50886), (15, 50904), (22, 50949), (28, 51018), (32, 51048), (33, 51054), (34, 51063), (35, 51066), (48, 51183), (51, 51216), (56, 51273), (58, 51285), (60, 51297), (61, 51300), (63, 51336), (64, 51342),

Gene: Oogie_63 Start: 52624, Stop: 53085, Start Num: 15
Candidate Starts for Oogie_63:
(Start: 10 @52591 has 8 MA's), (13, 52606), (15, 52624), (22, 52669), (28, 52738), (32, 52768), (33, 52774), (34, 52783), (35, 52786), (48, 52903), (51, 52936), (56, 52993), (58, 53005), (60, 53017), (61, 53020), (63, 53056), (64, 53062),

Gene: Orchid_31 Start: 35532, Stop: 35969, Start Num: 9
Candidate Starts for Orchid_31:
(Start: 9 @35532 has 5 MA's), (19, 35607), (21, 35610), (25, 35637), (40, 35778),

Gene: Pakusa_61 Start: 50645, Stop: 51106, Start Num: 15
Candidate Starts for Pakusa_61:
(Start: 10 @50612 has 8 MA's), (13, 50627), (15, 50645), (22, 50690), (28, 50759), (32, 50789), (33, 50795), (34, 50804), (35, 50807), (48, 50924), (51, 50957), (56, 51014), (58, 51026), (60, 51038), (61, 51041), (63, 51077), (64, 51083),

Gene: PatrickStar_31 Start: 35532, Stop: 35969, Start Num: 9
Candidate Starts for PatrickStar_31:
(Start: 9 @35532 has 5 MA's), (19, 35607), (21, 35610), (25, 35637), (40, 35778),

Gene: RobinSparkles_34 Start: 36449, Stop: 36886, Start Num: 9
Candidate Starts for RobinSparkles_34:
(Start: 9 @36449 has 5 MA's), (19, 36524), (21, 36527), (25, 36554), (40, 36695),

Gene: ScarletRaider_62 Start: 53830, Stop: 54273, Start Num: 17

Candidate Starts for ScarletRaider_62:
(Start: 10 @53779 has 8 MA's), (13, 53794), (Start: 17 @53830 has 2 MA's), (27, 53890), (28, 53926), (29, 53947), (32, 53956), (33, 53962), (34, 53971), (35, 53974), (36, 53986), (37, 53992), (49, 54097), (50, 54121), (55, 54178), (56, 54181), (58, 54193), (60, 54205), (61, 54208), (64, 54250), (66, 54268),

Gene: Schomber_62 Start: 50620, Stop: 51114, Start Num: 10
Candidate Starts for Schomber_62:
(Start: 10 @50620 has 8 MA's), (13, 50635), (15, 50653), (22, 50698), (28, 50767), (32, 50797), (33, 50803), (34, 50812), (35, 50815), (48, 50932), (51, 50965), (56, 51022), (58, 51034), (60, 51046), (61, 51049), (63, 51085), (64, 51091),

Gene: Thales_58 Start: 53079, Stop: 53486, Start Num: 24
Candidate Starts for Thales_58:
(Start: 10 @52995 has 8 MA's), (18, 53040), (24, 53079), (28, 53139), (31, 53166), (32, 53169), (33, 53175), (38, 53214), (39, 53223), (41, 53256), (42, 53271), (45, 53283), (47, 53295), (52, 53346), (59, 53397), (62, 53424), (65, 53454),

Gene: Toneprano_61 Start: 50918, Stop: 51379, Start Num: 15
Candidate Starts for Toneprano_61:
(Start: 10 @50885 has 8 MA's), (13, 50900), (15, 50918), (22, 50963), (28, 51032), (32, 51062), (33, 51068), (34, 51077), (35, 51080), (48, 51197), (51, 51230), (56, 51287), (58, 51299), (60, 51311), (61, 51314), (63, 51350), (64, 51356),

Gene: Twin_61 Start: 50903, Stop: 51364, Start Num: 15
Candidate Starts for Twin_61:
(Start: 10 @50870 has 8 MA's), (13, 50885), (15, 50903), (22, 50948), (28, 51017), (32, 51047), (33, 51053), (34, 51062), (35, 51065), (48, 51182), (51, 51215), (56, 51272), (58, 51284), (60, 51296), (61, 51299), (63, 51335), (64, 51341),

Gene: UBSmoodge_65 Start: 54261, Stop: 54755, Start Num: 10
Candidate Starts for UBSmoodge_65:
(Start: 10 @54261 has 8 MA's), (13, 54276), (Start: 17 @54312 has 2 MA's), (27, 54372), (28, 54408), (29, 54429), (32, 54438), (33, 54444), (34, 54453), (36, 54468), (37, 54474), (49, 54579), (51, 54606), (55, 54660), (56, 54663), (58, 54675), (60, 54687), (61, 54690), (64, 54732), (66, 54750),