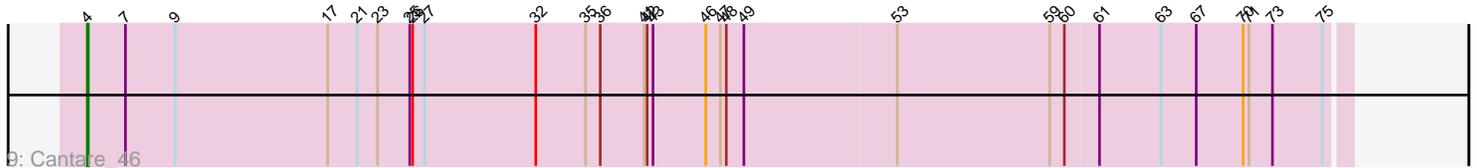
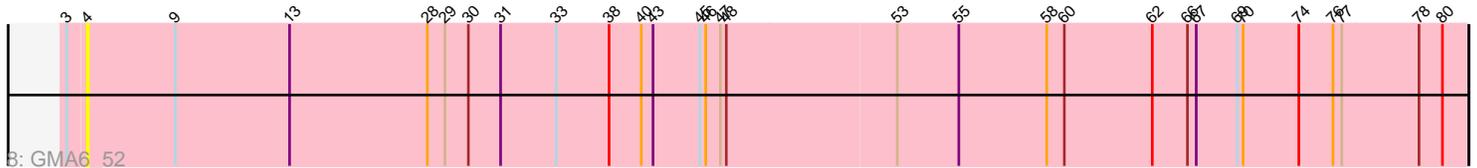
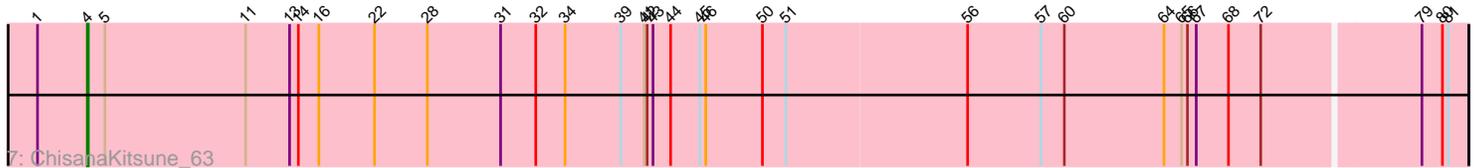
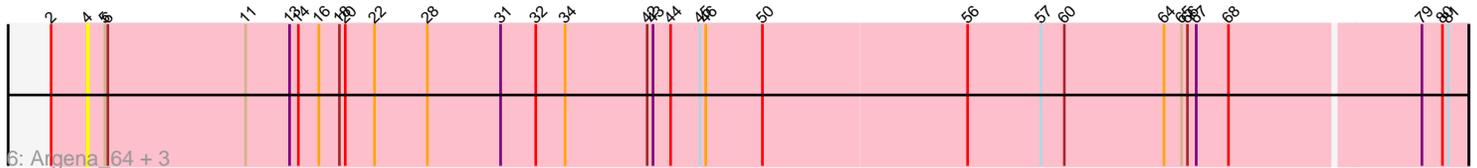
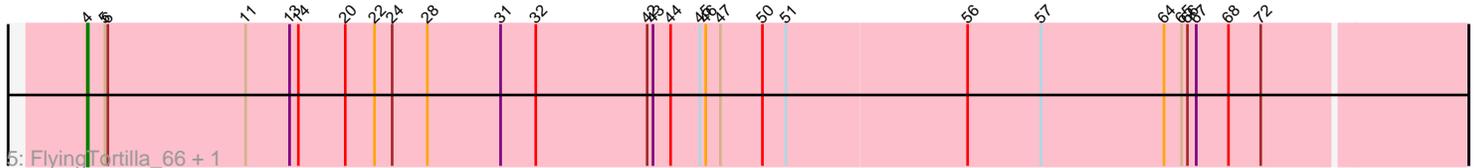
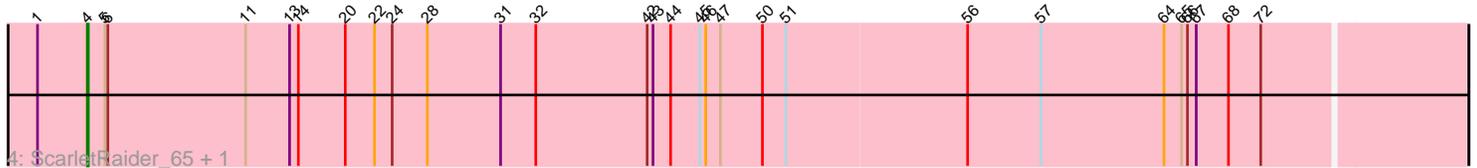
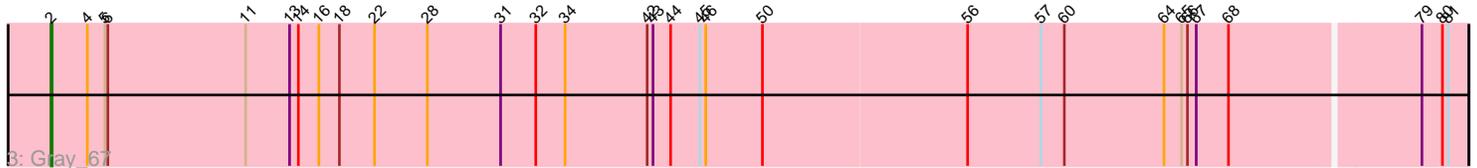
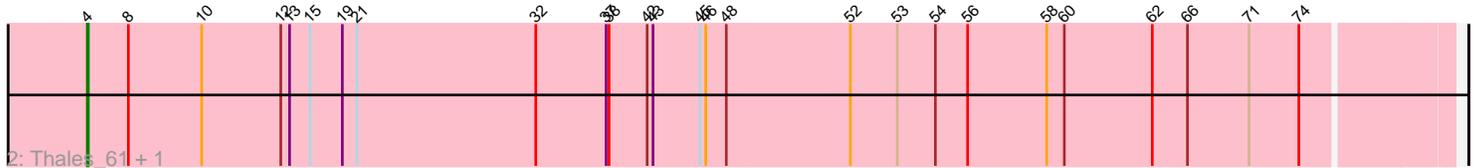
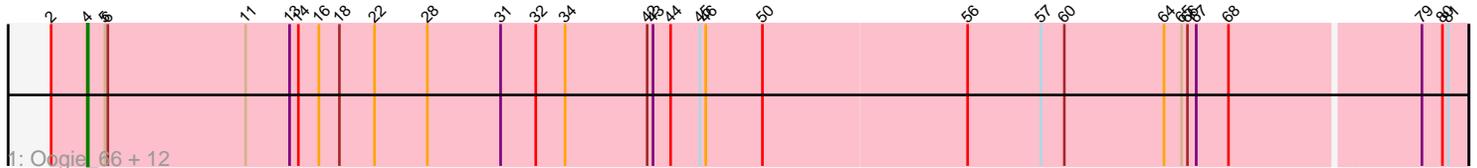


Pham 288138



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 288138 Report

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

Pham number 288138 has 27 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Oogie_66, Alok_64, Toneprano_64, Beted_66, Schomber_65, Chidiebere_67, EmoNemo_64, Mikronejon_64, MintFritos_64, Hanem_66, Lenoshki_66, Kabocha_68, Twin_64
- Track 2 : Thales_61, DalanDe_62
- Track 3 : Gray_67
- Track 4 : ScarletRaider_65, UBSmoodge_68
- Track 5 : FlyingTortilla_66, FruityLoops_64
- Track 6 : Argena_64, Amoonguss_64, Pakusa_64, Farrylious_64
- Track 7 : ChisanaKitsune_63
- Track 8 : GMA6_52
- Track 9 : Cantare_46

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

The start number called the most often in the published annotations is 4, it was called in 10 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alok_64, Amoonguss_64, Argena_64, Beted_66, Cantare_46, Chidiebere_67, ChisanaKitsune_63, DalanDe_62, EmoNemo_64, Farrylious_64, FlyingTortilla_66, FruityLoops_64, GMA6_52, Hanem_66, Kabocha_68, Lenoshki_66, Mikronejon_64, MintFritos_64, Oogie_66, Pakusa_64, ScarletRaider_65, Schomber_65, Thales_61, Toneprano_64, Twin_64, UBSmoodge_68,

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

- Gray_67,

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

-

Summary by start number:

Start 2:

- Found in 18 of 27 (66.7%) of genes in pham

- Manual Annotations of this start: 1 of 11
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Gray_67 (DQ),

Start 4:

- Found in 27 of 27 (100.0%) of genes in pham
- Manual Annotations of this start: 10 of 11
- Called 96.3% of time when present
- Phage (with cluster) where this start called: Aloki_64 (DQ), Amoonguss_64 (DQ), Argena_64 (DQ), Beted_66 (DQ), Cantare_46 (singleton), Chidiebere_67 (DQ), ChisanaKitsune_63 (DQ), DalanDe_62 (DQ), EmoNemo_64 (DQ), Farrylous_64 (DQ), FlyingTortilla_66 (DQ), FruityLoops_64 (DQ), GMA6_52 (DQ), Hanem_66 (DQ), Kabocha_68 (DQ), Lenoshki_66 (DQ), Mikronejon_64 (DQ), MintFritos_64 (DQ), Oogie_66 (DQ), Pakusa_64 (DQ), ScarletRaider_65 (DQ), Schomber_65 (DQ), Thales_61 (DQ), Toneprano_64 (DQ), Twin_64 (DQ), UBSmoodge_68 (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 1 time for cluster DQ.
- Start number 4 was manually annotated 9 times for cluster DQ.

Gene Information:

Gene: Aloki_64 Start: 54124, Stop: 52727, Start Num: 4

Candidate Starts for Aloki_64:

(Start: 2 @54160 has 1 MA's), (Start: 4 @54124 has 10 MA's), (5, 54106), (6, 54103), (11, 53962), (13, 53917), (14, 53908), (16, 53887), (18, 53866), (22, 53830), (28, 53776), (31, 53701), (32, 53665), (34, 53635), (42, 53551), (43, 53545), (44, 53527), (45, 53497), (46, 53491), (50, 53434), (56, 53227), (57, 53152), (60, 53128), (64, 53026), (65, 53008), (66, 53002), (67, 52993), (68, 52960), (79, 52774), (80, 52753), (81, 52747),

Gene: Amoonguss_64 Start: 54127, Stop: 52730, Start Num: 4

Candidate Starts for Amoonguss_64:

(Start: 2 @54163 has 1 MA's), (Start: 4 @54127 has 10 MA's), (5, 54109), (6, 54106), (11, 53965), (13, 53920), (14, 53911), (16, 53890), (18, 53869), (20, 53863), (22, 53833), (28, 53779), (31, 53704), (32, 53668), (34, 53638), (42, 53554), (43, 53548), (44, 53530), (45, 53500), (46, 53494), (50, 53437), (56, 53230), (57, 53155), (60, 53131), (64, 53029), (65, 53011), (66, 53005), (67, 52996), (68, 52963), (79, 52777), (80, 52756), (81, 52750),

Gene: Argena_64 Start: 54139, Stop: 52742, Start Num: 4

Candidate Starts for Argena_64:

(Start: 2 @54175 has 1 MA's), (Start: 4 @54139 has 10 MA's), (5, 54121), (6, 54118), (11, 53977), (13, 53932), (14, 53923), (16, 53902), (18, 53881), (20, 53875), (22, 53845), (28, 53791), (31, 53716), (32, 53680), (34, 53650), (42, 53566), (43, 53560), (44, 53542), (45, 53512), (46, 53506), (50, 53449), (56, 53242), (57, 53167), (60, 53143), (64, 53041), (65, 53023), (66, 53017), (67, 53008), (68, 52975), (79, 52789), (80, 52768), (81, 52762),

Gene: Beted_66 Start: 55819, Stop: 54422, Start Num: 4

Candidate Starts for Beted_66:

(Start: 2 @55855 has 1 MA's), (Start: 4 @55819 has 10 MA's), (5, 55801), (6, 55798), (11, 55657), (13, 55612), (14, 55603), (16, 55582), (18, 55561), (22, 55525), (28, 55471), (31, 55396), (32, 55360), (34, 55330), (42, 55246), (43, 55240), (44, 55222), (45, 55192), (46, 55186), (50, 55129), (56, 54922), (57, 54847), (60, 54823), (64, 54721), (65, 54703), (66, 54697), (67, 54688), (68, 54655), (79, 54469), (80, 54448), (81, 54442),

Gene: Cantare_46 Start: 42802, Stop: 41522, Start Num: 4

Candidate Starts for Cantare_46:

(Start: 4 @42802 has 10 MA's), (7, 42763), (9, 42712), (17, 42556), (21, 42526), (23, 42505), (25, 42472), (26, 42469), (27, 42457), (32, 42343), (35, 42292), (36, 42277), (41, 42232), (42, 42229), (43, 42223), (46, 42169), (47, 42154), (48, 42148), (49, 42130), (53, 41977), (59, 41821), (60, 41806), (61, 41773), (63, 41710), (67, 41674), (70, 41626), (71, 41620), (73, 41596), (75, 41545),

Gene: Chidiebere_67 Start: 54655, Stop: 53258, Start Num: 4

Candidate Starts for Chidiebere_67:

(Start: 2 @54691 has 1 MA's), (Start: 4 @54655 has 10 MA's), (5, 54637), (6, 54634), (11, 54493), (13, 54448), (14, 54439), (16, 54418), (18, 54397), (22, 54361), (28, 54307), (31, 54232), (32, 54196), (34, 54166), (42, 54082), (43, 54076), (44, 54058), (45, 54028), (46, 54022), (50, 53965), (56, 53758), (57, 53683), (60, 53659), (64, 53557), (65, 53539), (66, 53533), (67, 53524), (68, 53491), (79, 53305), (80, 53284), (81, 53278),

Gene: ChisanaKitsune_63 Start: 53428, Stop: 52031, Start Num: 4

Candidate Starts for ChisanaKitsune_63:

(1, 53476), (Start: 4 @53428 has 10 MA's), (5, 53410), (11, 53266), (13, 53221), (14, 53212), (16, 53191), (22, 53134), (28, 53080), (31, 53005), (32, 52969), (34, 52939), (39, 52882), (41, 52858), (42, 52855), (43, 52849), (44, 52831), (45, 52801), (46, 52795), (50, 52738), (51, 52714), (56, 52531), (57, 52456), (60, 52432), (64, 52330), (65, 52312), (66, 52306), (67, 52297), (68, 52264), (72, 52231), (79, 52078), (80, 52057), (81, 52051),

Gene: DalanDe_62 Start: 57305, Stop: 55923, Start Num: 4

Candidate Starts for DalanDe_62:

(Start: 4 @57305 has 10 MA's), (8, 57263), (10, 57188), (12, 57107), (13, 57098), (15, 57077), (19, 57044), (21, 57029), (32, 56846), (37, 56774), (38, 56771), (42, 56732), (43, 56726), (45, 56678), (46, 56672), (48, 56651), (52, 56525), (53, 56477), (54, 56438), (56, 56405), (58, 56324), (60, 56306), (62, 56216), (66, 56180), (71, 56117), (74, 56066),

Gene: EmoNemo_64 Start: 54124, Stop: 52727, Start Num: 4

Candidate Starts for EmoNemo_64:

(Start: 2 @54160 has 1 MA's), (Start: 4 @54124 has 10 MA's), (5, 54106), (6, 54103), (11, 53962), (13, 53917), (14, 53908), (16, 53887), (18, 53866), (22, 53830), (28, 53776), (31, 53701), (32, 53665), (34, 53635), (42, 53551), (43, 53545), (44, 53527), (45, 53497), (46, 53491), (50, 53434), (56, 53227), (57, 53152), (60, 53128), (64, 53026), (65, 53008), (66, 53002), (67, 52993), (68, 52960), (79, 52774), (80, 52753), (81, 52747),

Gene: Farrylious_64 Start: 53903, Stop: 52506, Start Num: 4

Candidate Starts for Farrylious_64:

(Start: 2 @53939 has 1 MA's), (Start: 4 @53903 has 10 MA's), (5, 53885), (6, 53882), (11, 53741), (13, 53696), (14, 53687), (16, 53666), (18, 53645), (20, 53639), (22, 53609), (28, 53555), (31, 53480), (32, 53444), (34, 53414), (42, 53330), (43, 53324), (44, 53306), (45, 53276), (46, 53270), (50, 53213), (56, 53006), (57, 52931), (60, 52907), (64, 52805), (65, 52787), (66, 52781), (67, 52772), (68, 52739), (79, 52553), (80, 52532), (81, 52526),

Gene: FlyingTortilla_66 Start: 57749, Stop: 56355, Start Num: 4

Candidate Starts for FlyingTortilla_66:

(Start: 4 @57749 has 10 MA's), (5, 57731), (6, 57728), (11, 57587), (13, 57542), (14, 57533), (20, 57485), (22, 57455), (24, 57437), (28, 57401), (31, 57326), (32, 57290), (42, 57176), (43, 57170), (44, 57152), (45, 57122), (46, 57116), (47, 57101), (50, 57059), (51, 57035), (56, 56852), (57, 56777), (64, 56651), (65, 56633), (66, 56627), (67, 56618), (68, 56585), (72, 56552),

Gene: FruityLoops_64 Start: 57054, Stop: 55660, Start Num: 4

Candidate Starts for FruityLoops_64:

(Start: 4 @57054 has 10 MA's), (5, 57036), (6, 57033), (11, 56892), (13, 56847), (14, 56838), (20, 56790), (22, 56760), (24, 56742), (28, 56706), (31, 56631), (32, 56595), (42, 56481), (43, 56475), (44, 56457), (45, 56427), (46, 56421), (47, 56406), (50, 56364), (51, 56340), (56, 56157), (57, 56082), (64, 55956), (65, 55938), (66, 55932), (67, 55923), (68, 55890), (72, 55857),

Gene: GMA6_52 Start: 46011, Stop: 44611, Start Num: 4

Candidate Starts for GMA6_52:

(3, 46029), (Start: 4 @46011 has 10 MA's), (9, 45921), (13, 45804), (28, 45663), (29, 45645), (30, 45621), (31, 45588), (33, 45531), (38, 45477), (40, 45444), (43, 45432), (45, 45384), (46, 45378), (47, 45363), (48, 45357), (53, 45186), (55, 45123), (58, 45033), (60, 45015), (62, 44925), (66, 44889), (67, 44880), (69, 44838), (70, 44832), (74, 44775), (76, 44742), (77, 44733), (78, 44655), (80, 44631),

Gene: Gray_67 Start: 54691, Stop: 53258, Start Num: 2

Candidate Starts for Gray_67:

(Start: 2 @54691 has 1 MA's), (Start: 4 @54655 has 10 MA's), (5, 54637), (6, 54634), (11, 54493), (13, 54448), (14, 54439), (16, 54418), (18, 54397), (22, 54361), (28, 54307), (31, 54232), (32, 54196), (34, 54166), (42, 54082), (43, 54076), (44, 54058), (45, 54028), (46, 54022), (50, 53965), (56, 53758), (57, 53683), (60, 53659), (64, 53557), (65, 53539), (66, 53533), (67, 53524), (68, 53491), (79, 53305), (80, 53284), (81, 53278),

Gene: Hanem_66 Start: 54124, Stop: 52727, Start Num: 4

Candidate Starts for Hanem_66:

(Start: 2 @54160 has 1 MA's), (Start: 4 @54124 has 10 MA's), (5, 54106), (6, 54103), (11, 53962), (13, 53917), (14, 53908), (16, 53887), (18, 53866), (22, 53830), (28, 53776), (31, 53701), (32, 53665), (34, 53635), (42, 53551), (43, 53545), (44, 53527), (45, 53497), (46, 53491), (50, 53434), (56, 53227), (57, 53152), (60, 53128), (64, 53026), (65, 53008), (66, 53002), (67, 52993), (68, 52960), (79, 52774), (80, 52753), (81, 52747),

Gene: Kabocha_68 Start: 55467, Stop: 54070, Start Num: 4

Candidate Starts for Kabocha_68:

(Start: 2 @55503 has 1 MA's), (Start: 4 @55467 has 10 MA's), (5, 55449), (6, 55446), (11, 55305), (13, 55260), (14, 55251), (16, 55230), (18, 55209), (22, 55173), (28, 55119), (31, 55044), (32, 55008), (34, 54978), (42, 54894), (43, 54888), (44, 54870), (45, 54840), (46, 54834), (50, 54777), (56, 54570), (57, 54495), (60, 54471), (64, 54369), (65, 54351), (66, 54345), (67, 54336), (68, 54303), (79, 54117), (80, 54096), (81, 54090),

Gene: Lenoshki_66 Start: 55819, Stop: 54422, Start Num: 4

Candidate Starts for Lenoshki_66:

(Start: 2 @55855 has 1 MA's), (Start: 4 @55819 has 10 MA's), (5, 55801), (6, 55798), (11, 55657), (13, 55612), (14, 55603), (16, 55582), (18, 55561), (22, 55525), (28, 55471), (31, 55396), (32, 55360), (34, 55330), (42, 55246), (43, 55240), (44, 55222), (45, 55192), (46, 55186), (50, 55129), (56, 54922), (57, 54847), (60, 54823), (64, 54721), (65, 54703), (66, 54697), (67, 54688), (68, 54655), (79, 54469), (80, 54448), (81, 54442),

Gene: Mikronejon_64 Start: 54124, Stop: 52727, Start Num: 4

Candidate Starts for Mikronejon_64:

(Start: 2 @54160 has 1 MA's), (Start: 4 @54124 has 10 MA's), (5, 54106), (6, 54103), (11, 53962), (13, 53917), (14, 53908), (16, 53887), (18, 53866), (22, 53830), (28, 53776), (31, 53701), (32, 53665), (34, 53635), (42, 53551), (43, 53545), (44, 53527), (45, 53497), (46, 53491), (50, 53434), (56, 53227), (57, 53152), (60, 53128), (64, 53026), (65, 53008), (66, 53002), (67, 52993), (68, 52960), (79, 52774), (80, 52753), (81, 52747),

Gene: MintFritos_64 Start: 54125, Stop: 52728, Start Num: 4

Candidate Starts for MintFritos_64:

(Start: 2 @54161 has 1 MA's), (Start: 4 @54125 has 10 MA's), (5, 54107), (6, 54104), (11, 53963), (13, 53918), (14, 53909), (16, 53888), (18, 53867), (22, 53831), (28, 53777), (31, 53702), (32, 53666), (34, 53636), (42, 53552), (43, 53546), (44, 53528), (45, 53498), (46, 53492), (50, 53435), (56, 53228), (57, 53153), (60, 53129), (64, 53027), (65, 53009), (66, 53003), (67, 52994), (68, 52961), (79, 52775), (80, 52754), (81, 52748),

Gene: Oogie_66 Start: 55845, Stop: 54448, Start Num: 4

Candidate Starts for Oogie_66:

(Start: 2 @55881 has 1 MA's), (Start: 4 @55845 has 10 MA's), (5, 55827), (6, 55824), (11, 55683), (13, 55638), (14, 55629), (16, 55608), (18, 55587), (22, 55551), (28, 55497), (31, 55422), (32, 55386), (34, 55356), (42, 55272), (43, 55266), (44, 55248), (45, 55218), (46, 55212), (50, 55155), (56, 54948), (57, 54873), (60, 54849), (64, 54747), (65, 54729), (66, 54723), (67, 54714), (68, 54681), (79, 54495), (80, 54474), (81, 54468),

Gene: Pakusa_64 Start: 53866, Stop: 52469, Start Num: 4

Candidate Starts for Pakusa_64:

(Start: 2 @53902 has 1 MA's), (Start: 4 @53866 has 10 MA's), (5, 53848), (6, 53845), (11, 53704), (13, 53659), (14, 53650), (16, 53629), (18, 53608), (20, 53602), (22, 53572), (28, 53518), (31, 53443), (32, 53407), (34, 53377), (42, 53293), (43, 53287), (44, 53269), (45, 53239), (46, 53233), (50, 53176), (56, 52969), (57, 52894), (60, 52870), (64, 52768), (65, 52750), (66, 52744), (67, 52735), (68, 52702), (79, 52516), (80, 52495), (81, 52489),

Gene: ScarletRaider_65 Start: 57036, Stop: 55642, Start Num: 4

Candidate Starts for ScarletRaider_65:

(1, 57084), (Start: 4 @57036 has 10 MA's), (5, 57018), (6, 57015), (11, 56874), (13, 56829), (14, 56820), (20, 56772), (22, 56742), (24, 56724), (28, 56688), (31, 56613), (32, 56577), (42, 56463), (43, 56457), (44, 56439), (45, 56409), (46, 56403), (47, 56388), (50, 56346), (51, 56322), (56, 56139), (57, 56064), (64, 55938), (65, 55920), (66, 55914), (67, 55905), (68, 55872), (72, 55839),

Gene: Schomber_65 Start: 53874, Stop: 52477, Start Num: 4

Candidate Starts for Schomber_65:

(Start: 2 @53910 has 1 MA's), (Start: 4 @53874 has 10 MA's), (5, 53856), (6, 53853), (11, 53712), (13, 53667), (14, 53658), (16, 53637), (18, 53616), (22, 53580), (28, 53526), (31, 53451), (32, 53415), (34, 53385), (42, 53301), (43, 53295), (44, 53277), (45, 53247), (46, 53241), (50, 53184), (56, 52977), (57, 52902), (60, 52878), (64, 52776), (65, 52758), (66, 52752), (67, 52743), (68, 52710), (79, 52524), (80, 52503), (81, 52497),

Gene: Thales_61 Start: 56220, Stop: 54838, Start Num: 4

Candidate Starts for Thales_61:

(Start: 4 @56220 has 10 MA's), (8, 56178), (10, 56103), (12, 56022), (13, 56013), (15, 55992), (19, 55959), (21, 55944), (32, 55761), (37, 55689), (38, 55686), (42, 55647), (43, 55641), (45, 55593), (46, 55587), (48, 55566), (52, 55440), (53, 55392), (54, 55353), (56, 55320), (58, 55239), (60, 55221), (62, 55131), (66, 55095), (71, 55032), (74, 54981),

Gene: Toneprano_64 Start: 54139, Stop: 52742, Start Num: 4

Candidate Starts for Toneprano_64:

(Start: 2 @54175 has 1 MA's), (Start: 4 @54139 has 10 MA's), (5, 54121), (6, 54118), (11, 53977), (13, 53932), (14, 53923), (16, 53902), (18, 53881), (22, 53845), (28, 53791), (31, 53716), (32, 53680), (34, 53650), (42, 53566), (43, 53560), (44, 53542), (45, 53512), (46, 53506), (50, 53449), (56, 53242), (57, 53167), (60, 53143), (64, 53041), (65, 53023), (66, 53017), (67, 53008), (68, 52975), (79, 52789), (80, 52768), (81, 52762),

Gene: Twin_64 Start: 54124, Stop: 52727, Start Num: 4

Candidate Starts for Twin_64:

(Start: 2 @54160 has 1 MA's), (Start: 4 @54124 has 10 MA's), (5, 54106), (6, 54103), (11, 53962), (13, 53917), (14, 53908), (16, 53887), (18, 53866), (22, 53830), (28, 53776), (31, 53701), (32, 53665), (34, 53635), (42, 53551), (43, 53545), (44, 53527), (45, 53497), (46, 53491), (50, 53434), (56, 53227), (57, 53152), (60, 53128), (64, 53026), (65, 53008), (66, 53002), (67, 52993), (68, 52960), (79, 52774), (80, 52753), (81, 52747),

Gene: UBSmoodge_68 Start: 57518, Stop: 56124, Start Num: 4

Candidate Starts for UBSmoodge_68:

(1, 57566), (Start: 4 @57518 has 10 MA's), (5, 57500), (6, 57497), (11, 57356), (13, 57311), (14, 57302), (20, 57254), (22, 57224), (24, 57206), (28, 57170), (31, 57095), (32, 57059), (42, 56945), (43, 56939), (44, 56921), (45, 56891), (46, 56885), (47, 56870), (50, 56828), (51, 56804), (56, 56621), (57, 56546), (64, 56420), (65, 56402), (66, 56396), (67, 56387), (68, 56354), (72, 56321),