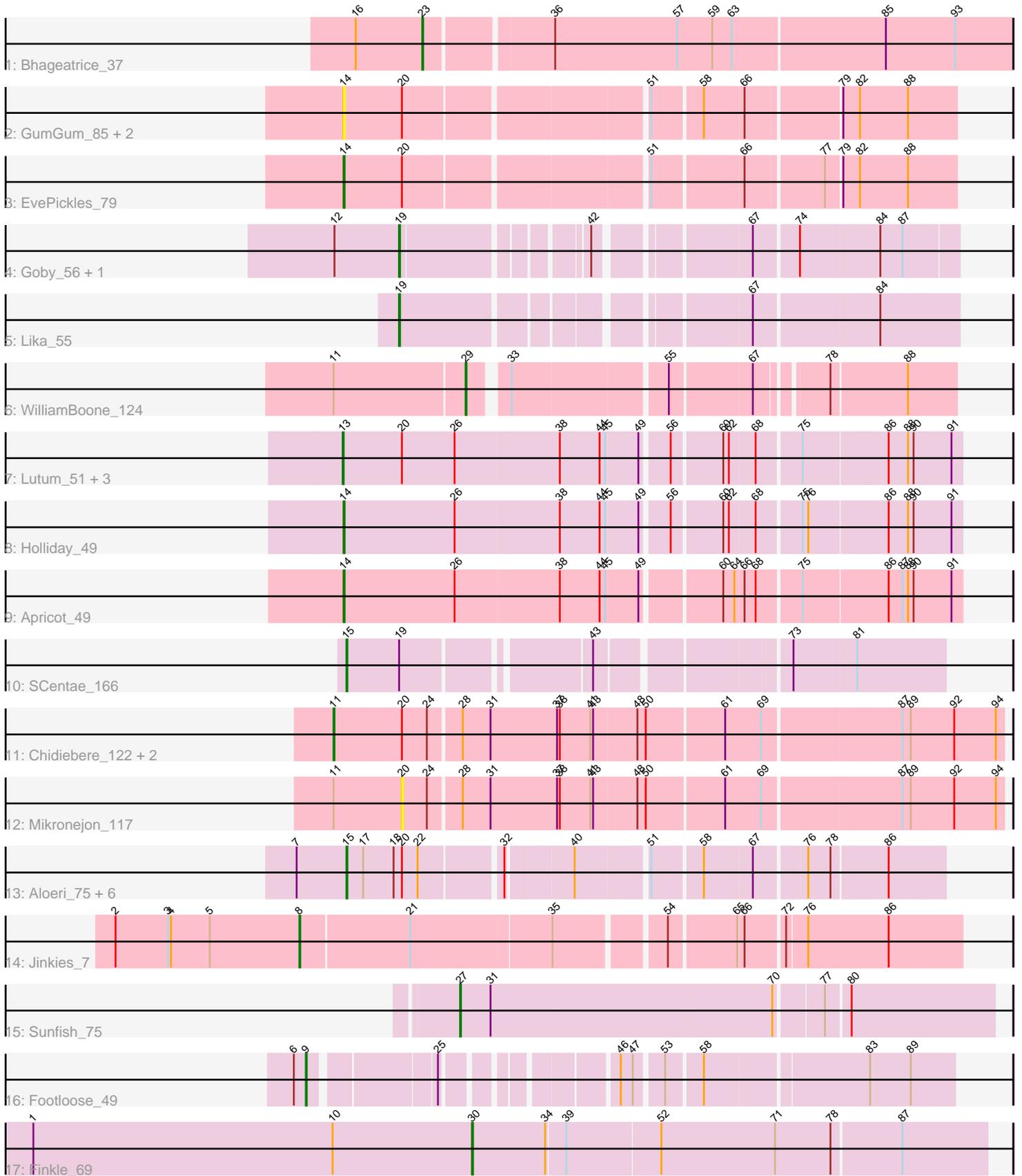# Pham 284047

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 284047 Report

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

Pham number 284047 has 31 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Bhageatrice_37
• Track 2 : GumGum_85, Lasker_82, CosmicBrownie_77
• Track 3 : EvePickles_79
• Track 4 : Goby_56, Toma_56
• Track 5 : Lika_55
• Track 6 : WilliamBoone_124
• Track 7 : Lutum_51, Kenna_50, Getalong_54, BENtherdunthat_51
• Track 8 : Holliday_49
• Track 9 : Apricot_49
• Track 10 : SCentae_166
• Track 11 : Chidiebere_122, Schomber_120, Kabocha_123
• Track 12 : Mikronejon_117
• Track 13 : Aloeri_75, DocMcStuffins_74, ChickenDinner_74, Misha28_72, TootsiePop_72, SkinnyPete_53, Awesomesauce_74
• Track 14 : Jinkies_7
• Track 15 : Sunfish_75
• Track 16 : Footloose_49
• Track 17 : Finkle_69

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

The start number called the most often in the published annotations is 15, it was called in 8 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aloeri_75, Awesomesauce_74, ChickenDinner_74, DocMcStuffins_74, Misha28_72, SCentae_166, SkinnyPete_53, TootsiePop_72,

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

Genes that do not have the "Most Annotated" start:
• Apricot_49, BENtherdunthat_51, Bhageatrice_37, Chidiebere_122, CosmicBrownie_77, EvePickles_79, Finkle_69, Footloose_49, Getalong_54,

Goby_56, GumGum_85, Holliday_49, Jinkies_7, Kabocha_123, Kenna_50, Lasker_82, Lika_55, Lutum_51, Mikronejon_117, Schomber_120, Sunfish_75, Toma_56, WilliamBoone_124,

Summary by start number:

Start 8:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jinkies_7 (FL),

Start 9:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Footloose_49 (singleton),

Start 11:
• Found in 5 of 31 (16.1%) of genes in pham
• Manual Annotations of this start: 3 of 27
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Chidiebere_122 (DQ), Kabocha_123 (DQ), Schomber_120 (DQ),

Start 13:
• Found in 4 of 31 (12.9%) of genes in pham
• Manual Annotations of this start: 4 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BENtherdunthat_51 (DN1), Getalong_54 (DN1), Kenna_50 (DN1), Lutum_51 (DN1),

Start 14:
• Found in 6 of 31 (19.4%) of genes in pham
• Manual Annotations of this start: 3 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apricot_49 (DN3), CosmicBrownie_77 (AY), EvePickles_79 (AY), GumGum_85 (AY), Holliday_49 (DN1), Lasker_82 (AY),

Start 15:
• Found in 8 of 31 (25.8%) of genes in pham
• Manual Annotations of this start: 8 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aloeri_75 (F1), Awesomesauce_74 (F1), ChickenDinner_74 (F1), DocMcStuffins_74 (F1), Misha28_72 (F1), SCentae_166 (DO), SkinnyPete_53 (N), TootsiePop_72 (F1),

Start 19:
• Found in 4 of 31 (12.9%) of genes in pham
• Manual Annotations of this start: 3 of 27
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Goby_56 (BD1), Lika_55 (BD1), Toma_56 (BD1),

Start 20:
• Found in 19 of 31 (61.3%) of genes in pham
• No Manual Annotations of this start.
• Called 5.3% of time when present
• Phage (with cluster) where this start called: Mikronejon_117 (DQ),

Start 23:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bhageatrice_37 (AY),

Start 27:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sunfish_75 (singleton),

Start 29:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: WilliamBoone_124 (CQ1),

Start 30:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Finkle_69 (singleton),

Summary by clusters:

There are 11 clusters represented in this pham: F1, singleton, DO, N, BD1, DN3, AY, DN1, CQ1, FL, DQ,

Info for manual annotations of cluster AY:
•Start number 14 was manually annotated 1 time for cluster AY.
•Start number 23 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster BD1:
•Start number 19 was manually annotated 3 times for cluster BD1.

Info for manual annotations of cluster CQ1:
•Start number 29 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster DN1:
•Start number 13 was manually annotated 4 times for cluster DN1.
•Start number 14 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN3:
•Start number 14 was manually annotated 1 time for cluster DN3.

Info for manual annotations of cluster DO:
•Start number 15 was manually annotated 1 time for cluster DO.

Info for manual annotations of cluster DQ:
•Start number 11 was manually annotated 3 times for cluster DQ.

Info for manual annotations of cluster F1:
•Start number 15 was manually annotated 6 times for cluster F1.

Info for manual annotations of cluster FL:
•Start number 8 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster N:
•Start number 15 was manually annotated 1 time for cluster N.

Gene Information:
Gene: Aloeri_75 Start: 46126, Stop: 46713, Start Num: 15
Candidate Starts for Aloeri_75:
(7, 46072), (Start: 15 @46126 has 8 MA's), (17, 46144), (18, 46177), (20, 46186), (22, 46201), (32, 46282), (40, 46348), (51, 46420), (58, 46471), (67, 46522), (76, 46573), (78, 46597), (86, 46654),

Gene: Apricot_49 Start: 33085, Stop: 32453, Start Num: 14
Candidate Starts for Apricot_49:
(Start: 14 @33085 has 3 MA's), (26, 32965), (38, 32854), (44, 32812), (45, 32806), (49, 32773), (60, 32695), (64, 32683), (66, 32674), (68, 32662), (75, 32617), (86, 32530), (87, 32515), (88, 32509), (90, 32503), (91, 32464),

Gene: Awesomesauce_74 Start: 45209, Stop: 45796, Start Num: 15
Candidate Starts for Awesomesauce_74:
(7, 45155), (Start: 15 @45209 has 8 MA's), (17, 45227), (18, 45260), (20, 45269), (22, 45284), (32, 45365), (40, 45431), (51, 45503), (58, 45554), (67, 45605), (76, 45656), (78, 45680), (86, 45737),

Gene: BENtherdunthat_51 Start: 33462, Stop: 32830, Start Num: 13
Candidate Starts for BENtherdunthat_51:
(Start: 13 @33462 has 4 MA's), (20, 33399), (26, 33342), (38, 33231), (44, 33189), (45, 33183), (49, 33150), (56, 33123), (60, 33072), (62, 33066), (68, 33039), (75, 32994), (86, 32907), (88, 32886), (90, 32880), (91, 32841),

Gene: Bhageatrice_37 Start: 26729, Stop: 27340, Start Num: 23
Candidate Starts for Bhageatrice_37:
(16, 26657), (Start: 23 @26729 has 1 MA's), (36, 26855), (57, 26984), (59, 27020), (63, 27041), (85, 27203), (93, 27278),

Gene: ChickenDinner_74 Start: 46126, Stop: 46713, Start Num: 15
Candidate Starts for ChickenDinner_74:
(7, 46072), (Start: 15 @46126 has 8 MA's), (17, 46144), (18, 46177), (20, 46186), (22, 46201), (32, 46282), (40, 46348), (51, 46420), (58, 46471), (67, 46522), (76, 46573), (78, 46597), (86, 46654),

Gene: Chidiebere_122 Start: 85918, Stop: 86616, Start Num: 11
Candidate Starts for Chidiebere_122:

(Start: 11 @85918 has 3 MA's), (20, 85990), (24, 86017), (28, 86050), (31, 86080), (37, 86152), (38, 86155), (41, 86188), (43, 86191), (48, 86236), (50, 86245), (61, 86326), (69, 86365), (87, 86509), (89, 86518), (92, 86563), (94, 86608),

Gene: CosmicBrownie_77 Start: 44062, Stop: 44670, Start Num: 14
Candidate Starts for CosmicBrownie_77:
(Start: 14 @44062 has 3 MA's), (20, 44125), (51, 44365), (58, 44416), (66, 44458), (79, 44551), (82, 44569), (88, 44620),

Gene: DocMcStuffins_74 Start: 46126, Stop: 46713, Start Num: 15
Candidate Starts for DocMcStuffins_74:
(7, 46072), (Start: 15 @46126 has 8 MA's), (17, 46144), (18, 46177), (20, 46186), (22, 46201), (32, 46282), (40, 46348), (51, 46420), (58, 46471), (67, 46522), (76, 46573), (78, 46597), (86, 46654),

Gene: EvePickles_79 Start: 46090, Stop: 46698, Start Num: 14
Candidate Starts for EvePickles_79:
(Start: 14 @46090 has 3 MA's), (20, 46153), (51, 46393), (66, 46486), (77, 46564), (79, 46579), (82, 46597), (88, 46648),

Gene: Finkle_69 Start: 42637, Stop: 43176, Start Num: 30
Candidate Starts for Finkle_69:
(1, 42163), (10, 42487), (Start: 30 @42637 has 1 MA's), (34, 42715), (39, 42733), (52, 42832), (71, 42955), (78, 43015), (87, 43087),

Gene: Footloose_49 Start: 28880, Stop: 29479, Start Num: 9
Candidate Starts for Footloose_49:
(6, 28868), (Start: 9 @28880 has 1 MA's), (25, 29000), (46, 29150), (47, 29162), (53, 29189), (58, 29225), (83, 29393), (89, 29435),

Gene: Getalong_54 Start: 36463, Stop: 35831, Start Num: 13
Candidate Starts for Getalong_54:
(Start: 13 @36463 has 4 MA's), (20, 36400), (26, 36343), (38, 36232), (44, 36190), (45, 36184), (49, 36151), (56, 36124), (60, 36073), (62, 36067), (68, 36040), (75, 35995), (86, 35908), (88, 35887), (90, 35881), (91, 35842),

Gene: Goby_56 Start: 42305, Stop: 41778, Start Num: 19
Candidate Starts for Goby_56:
(12, 42374), (Start: 19 @42305 has 3 MA's), (42, 42131), (67, 41987), (74, 41942), (84, 41858), (87, 41834),

Gene: GumGum_85 Start: 45863, Stop: 46471, Start Num: 14
Candidate Starts for GumGum_85:
(Start: 14 @45863 has 3 MA's), (20, 45926), (51, 46166), (58, 46217), (66, 46259), (79, 46352), (82, 46370), (88, 46421),

Gene: Holliday_49 Start: 33694, Stop: 33062, Start Num: 14
Candidate Starts for Holliday_49:
(Start: 14 @33694 has 3 MA's), (26, 33574), (38, 33463), (44, 33421), (45, 33415), (49, 33382), (56, 33355), (60, 33304), (62, 33298), (68, 33271), (75, 33226), (76, 33220), (86, 33139), (88, 33118), (90, 33112), (91, 33073),

Gene: Jinkies_7 Start: 5796, Stop: 6461, Start Num: 8
Candidate Starts for Jinkies_7:

(2, 5598), (3, 5655), (4, 5658), (5, 5700), (Start: 8 @5796 has 1 MA's), (21, 5910), (35, 6057), (54, 6165), (65, 6234), (66, 6240), (72, 6279), (76, 6300), (86, 6384),

Gene: Kabocha_123 Start: 86731, Stop: 87429, Start Num: 11
Candidate Starts for Kabocha_123:
(Start: 11 @86731 has 3 MA's), (20, 86803), (24, 86830), (28, 86863), (31, 86893), (37, 86965), (38, 86968), (41, 87001), (43, 87004), (48, 87049), (50, 87058), (61, 87139), (69, 87178), (87, 87322), (89, 87331), (92, 87376), (94, 87421),

Gene: Kenna_50 Start: 34206, Stop: 33574, Start Num: 13
Candidate Starts for Kenna_50:
(Start: 13 @34206 has 4 MA's), (20, 34143), (26, 34086), (38, 33975), (44, 33933), (45, 33927), (49, 33894), (56, 33867), (60, 33816), (62, 33810), (68, 33783), (75, 33738), (86, 33651), (88, 33630), (90, 33624), (91, 33585),

Gene: Lasker_82 Start: 46302, Stop: 46910, Start Num: 14
Candidate Starts for Lasker_82:
(Start: 14 @46302 has 3 MA's), (20, 46365), (51, 46605), (58, 46656), (66, 46698), (79, 46791), (82, 46809), (88, 46860),

Gene: Lika_55 Start: 42316, Stop: 41774, Start Num: 19
Candidate Starts for Lika_55:
(Start: 19 @42316 has 3 MA's), (67, 41986), (84, 41857),

Gene: Lutum_51 Start: 34206, Stop: 33574, Start Num: 13
Candidate Starts for Lutum_51:
(Start: 13 @34206 has 4 MA's), (20, 34143), (26, 34086), (38, 33975), (44, 33933), (45, 33927), (49, 33894), (56, 33867), (60, 33816), (62, 33810), (68, 33783), (75, 33738), (86, 33651), (88, 33630), (90, 33624), (91, 33585),

Gene: Mikronejon_117 Start: 85340, Stop: 85966, Start Num: 20
Candidate Starts for Mikronejon_117:
(Start: 11 @85268 has 3 MA's), (20, 85340), (24, 85367), (28, 85400), (31, 85430), (37, 85502), (38, 85505), (41, 85538), (43, 85541), (48, 85586), (50, 85595), (61, 85676), (69, 85715), (87, 85859), (89, 85868), (92, 85913), (94, 85958),

Gene: Misha28_72 Start: 45214, Stop: 45801, Start Num: 15
Candidate Starts for Misha28_72:
(7, 45160), (Start: 15 @45214 has 8 MA's), (17, 45232), (18, 45265), (20, 45274), (22, 45289), (32, 45370), (40, 45436), (51, 45508), (58, 45559), (67, 45610), (76, 45661), (78, 45685), (86, 45742),

Gene: SCentae_166 Start: 121636, Stop: 122217, Start Num: 15
Candidate Starts for SCentae_166:
(Start: 15 @121636 has 8 MA's), (Start: 19 @121693 has 3 MA's), (43, 121873), (73, 122059), (81, 122125),

Gene: Schomber_120 Start: 85119, Stop: 85817, Start Num: 11
Candidate Starts for Schomber_120:
(Start: 11 @85119 has 3 MA's), (20, 85191), (24, 85218), (28, 85251), (31, 85281), (37, 85353), (38, 85356), (41, 85389), (43, 85392), (48, 85437), (50, 85446), (61, 85527), (69, 85566), (87, 85710), (89, 85719), (92, 85764), (94, 85809),

Gene: SkinnyPete_53 Start: 35995, Stop: 36582, Start Num: 15

Candidate Starts for SkinnyPete_53:
(7, 35941), (Start: 15 @35995 has 8 MA's), (17, 36013), (18, 36046), (20, 36055), (22, 36070), (32, 36151), (40, 36217), (51, 36289), (58, 36340), (67, 36391), (76, 36442), (78, 36466), (86, 36523),

Gene: Sunfish_75 Start: 46858, Stop: 46316, Start Num: 27
Candidate Starts for Sunfish_75:
(Start: 27 @46858 has 1 MA's), (31, 46828), (70, 46537), (77, 46489), (80, 46465),

Gene: Toma_56 Start: 42308, Stop: 41778, Start Num: 19
Candidate Starts for Toma_56:
(12, 42377), (Start: 19 @42308 has 3 MA's), (42, 42131), (67, 41987), (74, 41942), (84, 41858), (87, 41834),

Gene: TootsiePop_72 Start: 45214, Stop: 45801, Start Num: 15
Candidate Starts for TootsiePop_72:
(7, 45160), (Start: 15 @45214 has 8 MA's), (17, 45232), (18, 45265), (20, 45274), (22, 45289), (32, 45370), (40, 45436), (51, 45508), (58, 45559), (67, 45610), (76, 45661), (78, 45685), (86, 45742),

Gene: WilliamBoone_124 Start: 68689, Stop: 69156, Start Num: 29
Candidate Starts for WilliamBoone_124:
(Start: 11 @68554 has 3 MA's), (Start: 29 @68689 has 1 MA's), (33, 68722), (55, 68878), (67, 68962), (78, 69028), (88, 69106),