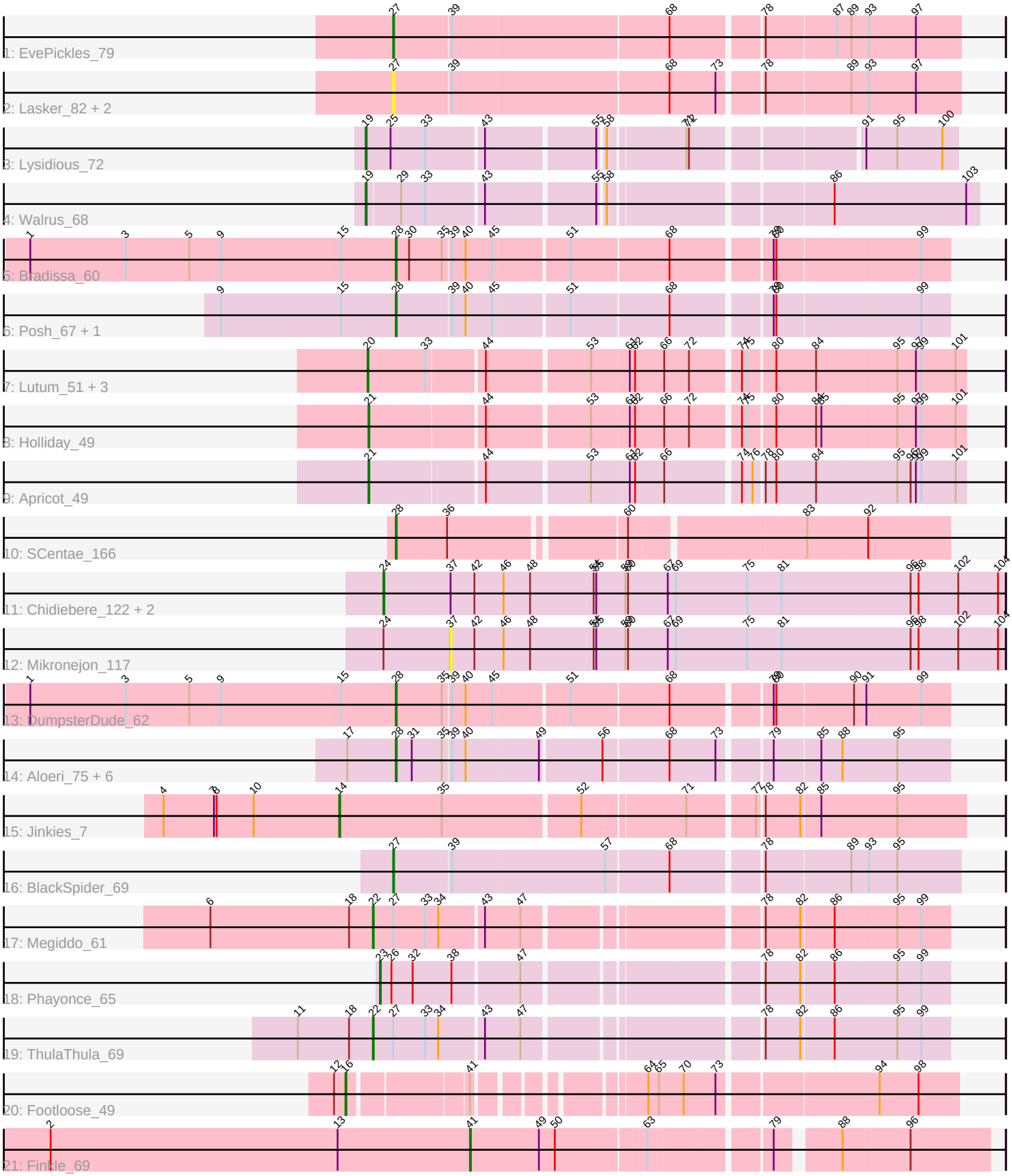
Pham 305180


1: EvePickles_79
2: Lasker_82 + 2
3: Lysidious_72
4: Walrus_68
5: Bradissa_60
6: Posh_67 + 1
7: Lutum_51 + 3
8: Holliday_49
9: Apricot_49
10: SCentae_166
11: Chidiebere_122 + 2
12: Mikronejon_117
13: DumpsterDude_62
14: Aloeri_75 + 6
15: Jinkies_7
16: BlackSpider_69
17: Megiddo_61
18: Phayonce_65
19: ThulaThula_69
20: Footloose_49
21: Finkle_69

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 305180 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305180 has 35 members, 4 are drafts.

Phages represented in each track:
• Track 1 : EvePickles_79
• Track 2 : Lasker_82, GumGum_85, CosmicBrownie_77
• Track 3 : Lysidious_72
• Track 4 : Walrus_68
• Track 5 : Bradissa_60
• Track 6 : Posh_67, Wrigley_69
• 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 : DumpsterDude_62
• Track 14 : Aloeri_75, DocMcStuffins_74, ChickenDinner_74, Misha28_72, SkinnyPete_53, Awesomesauce_74, TootsiePop_72
• Track 15 : Jinkies_7
• Track 16 : BlackSpider_69
• Track 17 : Megiddo_61
• Track 18 : Phayonce_65
• Track 19 : ThulaThula_69
• Track 20 : Footloose_49
• Track 21 : 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 28, it was called in 12 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aloeri_75, Awesomesauce_74, Bradissa_60, ChickenDinner_74, DocMcStuffins_74, DumpsterDude_62, Misha28_72, Posh_67, SCentae_166, SkinnyPete_53, TootsiePop_72, Wrigley_69,

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, BlackSpider_69, Chidiebere_122, CosmicBrownie_77, EvePickles_79, Finkle_69, Footloose_49, Getalong_54, GumGum_85, Holliday_49, Jinkies_7, Kabocha_123, Kenna_50, Lasker_82, Lutum_51, Lysidious_72, Megiddo_61, Mikronejon_117, Phayonce_65, Schomber_120, ThulaThula_69, Walrus_68,

Summary by start number:

Start 14:
• Found in 1 of 35 (2.9%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jinkies_7 (FL),

Start 16:
• Found in 1 of 35 (2.9%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Footloose_49 (singleton),

Start 19:
• Found in 2 of 35 (5.7%) of genes in pham
• Manual Annotations of this start: 2 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Lysidious_72 (CV), Walrus_68 (CV),

Start 20:
• Found in 4 of 35 (11.4%) of genes in pham
• Manual Annotations of this start: 4 of 31
• 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 21:
• Found in 2 of 35 (5.7%) of genes in pham
• Manual Annotations of this start: 2 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apricot_49 (DN3), Holliday_49 (DN1),

Start 22:
• Found in 2 of 35 (5.7%) of genes in pham
• Manual Annotations of this start: 2 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Megiddo_61 (P1), ThulaThula_69 (P5),

Start 23:
• Found in 1 of 35 (2.9%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phayonce_65 (P5),

Start 24:
• Found in 4 of 35 (11.4%) of genes in pham
• Manual Annotations of this start: 3 of 31
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Chidiebere_122 (DQ), Kabocha_123 (DQ), Schomber_120 (DQ),

Start 27:
• Found in 7 of 35 (20.0%) of genes in pham
• Manual Annotations of this start: 2 of 31
• Called 71.4% of time when present
• Phage (with cluster) where this start called: BlackSpider_69 (FN), CosmicBrownie_77 (AY), EvePickles_79 (AY), GumGum_85 (AY), Lasker_82 (AY),

Start 28:
• Found in 12 of 35 (34.3%) of genes in pham
• Manual Annotations of this start: 12 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aloeri_75 (F1), Awesomesauce_74 (F1), Bradissa_60 (CY1), ChickenDinner_74 (F1), DocMcStuffins_74 (F1), DumpsterDude_62 (DW), Misha28_72 (F1), Posh_67 (CY4), SCentae_166 (DO), SkinnyPete_53 (N), TootsiePop_72 (F1), Wrigley_69 (CY4),

Start 37:
• Found in 4 of 35 (11.4%) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Mikronejon_117 (DQ),

Start 41:
• Found in 2 of 35 (5.7%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Finkle_69 (singleton),

Summary by clusters:

There are 16 clusters represented in this pham: DO, F1, singleton, P1, P5, CY4, CY1, N, DN1, DN3, AY, DW, FL, CV, FN, DQ,

Info for manual annotations of cluster AY:
•Start number 27 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CV:
•Start number 19 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster CY1:
•Start number 28 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CY4:
•Start number 28 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster DN1:
•Start number 20 was manually annotated 4 times for cluster DN1.
•Start number 21 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN3:
•Start number 21 was manually annotated 1 time for cluster DN3.

Info for manual annotations of cluster DO:
•Start number 28 was manually annotated 1 time for cluster DO.

Info for manual annotations of cluster DQ:
•Start number 24 was manually annotated 3 times for cluster DQ.

Info for manual annotations of cluster DW:
•Start number 28 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster F1:
•Start number 28 was manually annotated 6 times for cluster F1.

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

Info for manual annotations of cluster FN:
•Start number 27 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster N:
•Start number 28 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P1:
•Start number 22 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster P5:
•Start number 22 was manually annotated 1 time for cluster P5.
•Start number 23 was manually annotated 1 time for cluster P5.

Gene Information:

Gene: Aloeri_75 Start: 46126, Stop: 46713, Start Num: 28
Candidate Starts for Aloeri_75:
(17, 46072), (Start: 28 @46126 has 12 MA's), (31, 46144), (35, 46177), (39, 46186), (40, 46201), (49, 46282), (56, 46348), (68, 46420), (73, 46471), (79, 46522), (85, 46573), (88, 46597), (95, 46654),

Gene: Apricot_49 Start: 33085, Stop: 32453, Start Num: 21
Candidate Starts for Apricot_49:
(Start: 21 @33085 has 2 MA's), (44, 32965), (53, 32854), (61, 32812), (62, 32806), (66, 32773), (74, 32695), (76, 32683), (78, 32674), (80, 32662), (84, 32617), (95, 32530), (96, 32515), (97, 32509), (99, 32503), (101, 32464),

Gene: Awesomesauce_74 Start: 45209, Stop: 45796, Start Num: 28
Candidate Starts for Awesomesauce_74:

(17, 45155), (Start: 28 @45209 has 12 MA's), (31, 45227), (35, 45260), (39, 45269), (40, 45284), (49, 45365), (56, 45431), (68, 45503), (73, 45554), (79, 45605), (85, 45656), (88, 45680), (95, 45737),

Gene: BENtherdunthat_51 Start: 33462, Stop: 32830, Start Num: 20
Candidate Starts for BENtherdunthat_51:
(Start: 20 @33462 has 4 MA's), (33, 33399), (44, 33342), (53, 33231), (61, 33189), (62, 33183), (66, 33150), (72, 33123), (74, 33072), (75, 33066), (80, 33039), (84, 32994), (95, 32907), (97, 32886), (99, 32880), (101, 32841),

Gene: BlackSpider_69 Start: 42752, Stop: 43360, Start Num: 27
Candidate Starts for BlackSpider_69:
(Start: 27 @42752 has 2 MA's), (39, 42815), (57, 42986), (68, 43055), (78, 43148), (89, 43241), (93, 43259), (95, 43289),

Gene: Bradissa_60 Start: 44116, Stop: 44703, Start Num: 28
Candidate Starts for Bradissa_60:
(1, 43708), (3, 43816), (5, 43888), (9, 43924), (15, 44056), (Start: 28 @44116 has 12 MA's), (30, 44131), (35, 44167), (39, 44176), (40, 44191), (45, 44221), (51, 44302), (68, 44410), (79, 44512), (80, 44515), (99, 44671),

Gene: ChickenDinner_74 Start: 46126, Stop: 46713, Start Num: 28
Candidate Starts for ChickenDinner_74:
(17, 46072), (Start: 28 @46126 has 12 MA's), (31, 46144), (35, 46177), (39, 46186), (40, 46201), (49, 46282), (56, 46348), (68, 46420), (73, 46471), (79, 46522), (85, 46573), (88, 46597), (95, 46654),

Gene: Chidiebere_122 Start: 85918, Stop: 86616, Start Num: 24
Candidate Starts for Chidiebere_122:
(Start: 24 @85918 has 3 MA's), (37, 85990), (42, 86017), (46, 86050), (48, 86080), (54, 86152), (55, 86155), (59, 86188), (60, 86191), (67, 86236), (69, 86245), (75, 86326), (81, 86365), (96, 86509), (98, 86518), (102, 86563), (104, 86608),

Gene: CosmicBrownie_77 Start: 44062, Stop: 44670, Start Num: 27
Candidate Starts for CosmicBrownie_77:
(Start: 27 @44062 has 2 MA's), (39, 44125), (68, 44365), (73, 44416), (78, 44458), (89, 44551), (93, 44569), (97, 44620),

Gene: DocMcStuffins_74 Start: 46126, Stop: 46713, Start Num: 28
Candidate Starts for DocMcStuffins_74:
(17, 46072), (Start: 28 @46126 has 12 MA's), (31, 46144), (35, 46177), (39, 46186), (40, 46201), (49, 46282), (56, 46348), (68, 46420), (73, 46471), (79, 46522), (85, 46573), (88, 46597), (95, 46654),

Gene: DumpsterDude_62 Start: 46219, Stop: 46806, Start Num: 28
Candidate Starts for DumpsterDude_62:
(1, 45811), (3, 45919), (5, 45991), (9, 46027), (15, 46159), (Start: 28 @46219 has 12 MA's), (35, 46270), (39, 46279), (40, 46294), (45, 46324), (51, 46405), (68, 46513), (79, 46615), (80, 46618), (90, 46702), (91, 46714), (99, 46774),

Gene: EvePickles_79 Start: 46090, Stop: 46698, Start Num: 27
Candidate Starts for EvePickles_79:
(Start: 27 @46090 has 2 MA's), (39, 46153), (68, 46393), (78, 46486), (87, 46564), (89, 46579), (93, 46597), (97, 46648),

Gene: Finkle_69 Start: 42637, Stop: 43176, Start Num: 41

Candidate Starts for Finkle_69:
(2, 42163), (13, 42487), (Start: 41 @42637 has 1 MA's), (49, 42715), (50, 42733), (63, 42832), (79, 42955), (88, 43015), (96, 43087),

Gene: Footloose_49 Start: 28880, Stop: 29479, Start Num: 16
Candidate Starts for Footloose_49:
(12, 28868), (Start: 16 @28880 has 1 MA's), (Start: 41 @29000 has 1 MA's), (64, 29150), (65, 29162), (70, 29189), (73, 29225), (94, 29393), (98, 29435),

Gene: Getalong_54 Start: 36463, Stop: 35831, Start Num: 20
Candidate Starts for Getalong_54:
(Start: 20 @36463 has 4 MA's), (33, 36400), (44, 36343), (53, 36232), (61, 36190), (62, 36184), (66, 36151), (72, 36124), (74, 36073), (75, 36067), (80, 36040), (84, 35995), (95, 35908), (97, 35887), (99, 35881), (101, 35842),

Gene: GumGum_85 Start: 45863, Stop: 46471, Start Num: 27
Candidate Starts for GumGum_85:
(Start: 27 @45863 has 2 MA's), (39, 45926), (68, 46166), (73, 46217), (78, 46259), (89, 46352), (93, 46370), (97, 46421),

Gene: Holliday_49 Start: 33694, Stop: 33062, Start Num: 21
Candidate Starts for Holliday_49:
(Start: 21 @33694 has 2 MA's), (44, 33574), (53, 33463), (61, 33421), (62, 33415), (66, 33382), (72, 33355), (74, 33304), (75, 33298), (80, 33271), (84, 33226), (85, 33220), (95, 33139), (97, 33118), (99, 33112), (101, 33073),

Gene: Jinkies_7 Start: 5796, Stop: 6461, Start Num: 14
Candidate Starts for Jinkies_7:
(4, 5598), (7, 5655), (8, 5658), (10, 5700), (Start: 14 @5796 has 1 MA's), (35, 5910), (52, 6057), (71, 6165), (77, 6234), (78, 6240), (82, 6279), (85, 6300), (95, 6384),

Gene: Kabocha_123 Start: 86731, Stop: 87429, Start Num: 24
Candidate Starts for Kabocha_123:
(Start: 24 @86731 has 3 MA's), (37, 86803), (42, 86830), (46, 86863), (48, 86893), (54, 86965), (55, 86968), (59, 87001), (60, 87004), (67, 87049), (69, 87058), (75, 87139), (81, 87178), (96, 87322), (98, 87331), (102, 87376), (104, 87421),

Gene: Kenna_50 Start: 34206, Stop: 33574, Start Num: 20
Candidate Starts for Kenna_50:
(Start: 20 @34206 has 4 MA's), (33, 34143), (44, 34086), (53, 33975), (61, 33933), (62, 33927), (66, 33894), (72, 33867), (74, 33816), (75, 33810), (80, 33783), (84, 33738), (95, 33651), (97, 33630), (99, 33624), (101, 33585),

Gene: Lasker_82 Start: 46302, Stop: 46910, Start Num: 27
Candidate Starts for Lasker_82:
(Start: 27 @46302 has 2 MA's), (39, 46365), (68, 46605), (73, 46656), (78, 46698), (89, 46791), (93, 46809), (97, 46860),

Gene: Lutum_51 Start: 34206, Stop: 33574, Start Num: 20
Candidate Starts for Lutum_51:
(Start: 20 @34206 has 4 MA's), (33, 34143), (44, 34086), (53, 33975), (61, 33933), (62, 33927), (66, 33894), (72, 33867), (74, 33816), (75, 33810), (80, 33783), (84, 33738), (95, 33651), (97, 33630), (99, 33624), (101, 33585),

Gene: Lysidious_72 Start: 45013, Stop: 45621, Start Num: 19
Candidate Starts for Lysidious_72:
(Start: 19 @45013 has 2 MA's), (25, 45040), (33, 45079), (43, 45139), (55, 45256), (58, 45262), (71, 45343), (72, 45346), (91, 45520), (95, 45553), (100, 45604),

Gene: Megiddo_61 Start: 41199, Stop: 41795, Start Num: 22
Candidate Starts for Megiddo_61:
(6, 41016), (18, 41172), (Start: 22 @41199 has 2 MA's), (Start: 27 @41220 has 2 MA's), (33, 41256), (34, 41271), (43, 41316), (47, 41355), (78, 41595), (82, 41634), (86, 41670), (95, 41736), (99, 41763),

Gene: Mikronejon_117 Start: 85340, Stop: 85966, Start Num: 37
Candidate Starts for Mikronejon_117:
(Start: 24 @85268 has 3 MA's), (37, 85340), (42, 85367), (46, 85400), (48, 85430), (54, 85502), (55, 85505), (59, 85538), (60, 85541), (67, 85586), (69, 85595), (75, 85676), (81, 85715), (96, 85859), (98, 85868), (102, 85913), (104, 85958),

Gene: Misha28_72 Start: 45214, Stop: 45801, Start Num: 28
Candidate Starts for Misha28_72:
(17, 45160), (Start: 28 @45214 has 12 MA's), (31, 45232), (35, 45265), (39, 45274), (40, 45289), (49, 45370), (56, 45436), (68, 45508), (73, 45559), (79, 45610), (85, 45661), (88, 45685), (95, 45742),

Gene: Phayonce_65 Start: 43286, Stop: 43876, Start Num: 23
Candidate Starts for Phayonce_65:
(Start: 23 @43286 has 1 MA's), (26, 43298), (32, 43322), (38, 43364), (47, 43436), (78, 43676), (82, 43715), (86, 43751), (95, 43817), (99, 43844),

Gene: Posh_67 Start: 45892, Stop: 46479, Start Num: 28
Candidate Starts for Posh_67:
(9, 45700), (15, 45832), (Start: 28 @45892 has 12 MA's), (39, 45952), (40, 45967), (45, 45997), (51, 46078), (68, 46186), (79, 46288), (80, 46291), (99, 46447),

Gene: SCentae_166 Start: 121636, Stop: 122217, Start Num: 28
Candidate Starts for SCentae_166:
(Start: 28 @121636 has 12 MA's), (36, 121693), (60, 121873), (83, 122059), (92, 122125),

Gene: Schomber_120 Start: 85119, Stop: 85817, Start Num: 24
Candidate Starts for Schomber_120:
(Start: 24 @85119 has 3 MA's), (37, 85191), (42, 85218), (46, 85251), (48, 85281), (54, 85353), (55, 85356), (59, 85389), (60, 85392), (67, 85437), (69, 85446), (75, 85527), (81, 85566), (96, 85710), (98, 85719), (102, 85764), (104, 85809),

Gene: SkinnyPete_53 Start: 35995, Stop: 36582, Start Num: 28
Candidate Starts for SkinnyPete_53:
(17, 35941), (Start: 28 @35995 has 12 MA's), (31, 36013), (35, 36046), (39, 36055), (40, 36070), (49, 36151), (56, 36217), (68, 36289), (73, 36340), (79, 36391), (85, 36442), (88, 36466), (95, 36523),

Gene: ThulaThula_69 Start: 44706, Stop: 45302, Start Num: 22
Candidate Starts for ThulaThula_69:
(11, 44622), (18, 44679), (Start: 22 @44706 has 2 MA's), (Start: 27 @44727 has 2 MA's), (33, 44763), (34, 44778), (43, 44823), (47, 44862), (78, 45102), (82, 45141), (86, 45177), (95, 45243), (99, 45270),

Gene: TootsiePop_72 Start: 45214, Stop: 45801, Start Num: 28

Candidate Starts for TootsiePop_72:
(17, 45160), (Start: 28 @45214 has 12 MA's), (31, 45232), (35, 45265), (39, 45274), (40, 45289), (49, 45370), (56, 45436), (68, 45508), (73, 45559), (79, 45610), (85, 45661), (88, 45685), (95, 45742),

Gene: Walrus_68 Start: 43422, Stop: 44057, Start Num: 19
Candidate Starts for Walrus_68:
(Start: 19 @43422 has 2 MA's), (29, 43458), (33, 43485), (43, 43545), (55, 43662), (58, 43668), (86, 43899), (103, 44043),

Gene: Wrigley_69 Start: 45475, Stop: 46062, Start Num: 28
Candidate Starts for Wrigley_69:
(9, 45283), (15, 45415), (Start: 28 @45475 has 12 MA's), (39, 45535), (40, 45550), (45, 45580), (51, 45661), (68, 45769), (79, 45871), (80, 45874), (99, 46030),