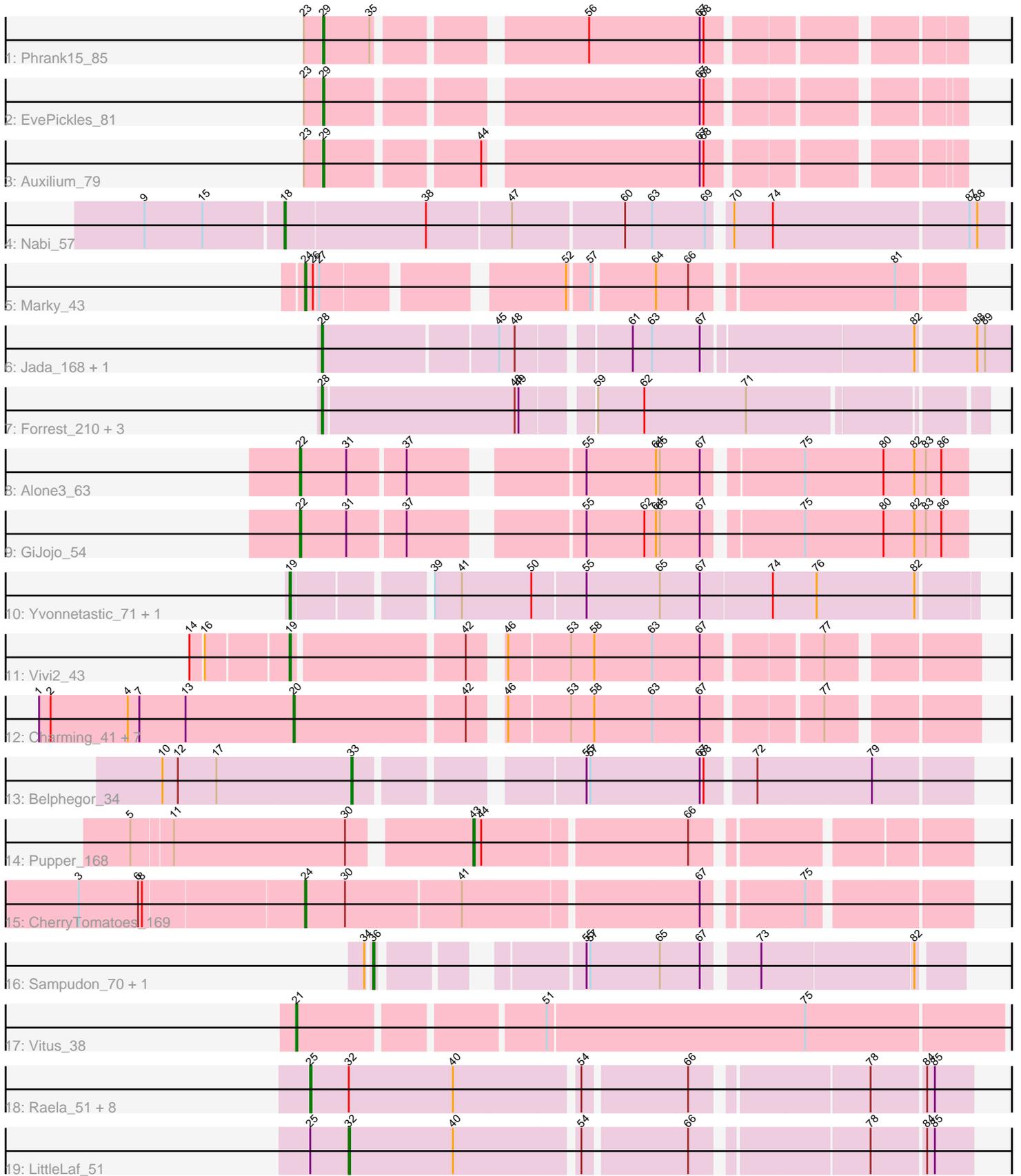# Pham 283979

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 283979 Report

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

Pham number 283979 has 40 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Phrank15_85
• Track 2 : EvePickles_81
• Track 3 : Auxilium_79
• Track 4 : Nabi_57
• Track 5 : Marky_43
• Track 6 : Jada_168, Forrest_171
• Track 7 : Forrest_210, Phredrick_212, DeluluLabubu_212, Emma1919_210
• Track 8 : Alone3_63
• Track 9 : GiJojo_54
• Track 10 : Yvonnetastic_71, JonJames_73
• Track 11 : Vivi2_43
• Track 12 : Charming_41, Paries_43, Nordenberg_35, Tangent_41, Rofo_41, Love_44, BobBob_38, Brandonk123_42
• Track 13 : Belphegor_34
• Track 14 : Pupper_168
• Track 15 : CherryTomatoes_169
• Track 16 : Sampudon_70, Jalebi_69
• Track 17 : Vitus_38
• Track 18 : Raela_51, Beelzebub_55, Poise_51, Clarkson_52, Pringar_51, Lilbit_50, Huphlepuff_53, Blackbeetle_51, VasuNzinga_51
• Track 19 : LittleLaf_51

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

The start number called the most often in the published annotations is 25, it was called in 9 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Beelzebub_55, Blackbeetle_51, Clarkson_52, Huphlepuff_53, Lilbit_50, Poise_51, Pringar_51, Raela_51, VasuNzinga_51,

Genes that have the "Most Annotated" start but do not call it:
• LittleLaf_51,

Genes that do not have the "Most Annotated" start:
• Alone3_63, Auxilium_79, Belphegor_34, BobBob_38, Brandonk123_42, Charming_41, CherryTomatoes_169, DeluluLabubu_212, Emma1919_210, EvePickles_81, Forrest_171, Forrest_210, GiJojo_54, Jada_168, Jalebi_69, JonJames_73, Love_44, Marky_43, Nabi_57, Nordenberg_35, Paries_43, Phrank15_85, Phredrick_212, Pupper_168, Rofo_41, Sampudon_70, Tangent_41, Vitus_38, Vivi2_43, Yvonnetastic_71,

Summary by start number:

Start 18:
• Found in 1 of 40 (2.5%) of genes in pham
• Manual Annotations of this start: 1 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nabi_57 (BD1),

Start 19:
• Found in 3 of 40 (7.5%) of genes in pham
• Manual Annotations of this start: 3 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: JonJames_73 (DD), Vivi2_43 (DE1), Yvonnetastic_71 (DD),

Start 20:
• Found in 8 of 40 (20.0%) of genes in pham
• Manual Annotations of this start: 8 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BobBob_38 (DE1), Brandonk123_42 (DE1), Charming_41 (DE1), Love_44 (DE1), Nordenberg_35 (DE1), Paries_43 (DE1), Rofo_41 (DE1), Tangent_41 (DE1),

Start 21:
• Found in 1 of 40 (2.5%) of genes in pham
• Manual Annotations of this start: 1 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Vitus_38 (FL),

Start 22:
• Found in 2 of 40 (5.0%) of genes in pham
• Manual Annotations of this start: 2 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alone3_63 (BS), GiJojo_54 (BS),

Start 24:
• Found in 2 of 40 (5.0%) of genes in pham
• Manual Annotations of this start: 2 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CherryTomatoes_169 (DO), Marky_43 (BH),

Start 25:
• Found in 10 of 40 (25.0%) of genes in pham
• Manual Annotations of this start: 9 of 39

• Called 90.0% of time when present
• Phage (with cluster) where this start called: Beelzebub_55 (S), Blackbeetle_51 (S), Clarkson_52 (S), Huphlepuff_53 (S), Lilbit_50 (S), Poise_51 (S), Pringar_51 (S), Raela_51 (S), VasuNzinga_51 (S),

Start 28:
• Found in 6 of 40 (15.0%) of genes in pham
• Manual Annotations of this start: 5 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DeluluLabubu_212 (BK1), Emma1919_210 (BK1), Forrest_171 (BK1), Forrest_210 (BK1), Jada_168 (BK1), Phredrick_212 (BK1),

Start 29:
• Found in 3 of 40 (7.5%) of genes in pham
• Manual Annotations of this start: 3 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Auxilium_79 (AY), EvePickles_81 (AY), Phrank15_85 (AY),

Start 32:
• Found in 10 of 40 (25.0%) of genes in pham
• Manual Annotations of this start: 1 of 39
• Called 10.0% of time when present
• Phage (with cluster) where this start called: LittleLaf_51 (S),

Start 33:
• Found in 1 of 40 (2.5%) of genes in pham
• Manual Annotations of this start: 1 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Belphegor_34 (DE2),

Start 36:
• Found in 2 of 40 (5.0%) of genes in pham
• Manual Annotations of this start: 2 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jalebi_69 (DV), Sampudon_70 (DV),

Start 43:
• Found in 1 of 40 (2.5%) of genes in pham
• Manual Annotations of this start: 1 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pupper_168 (DO),

Summary by clusters:

There are 12 clusters represented in this pham: DO, DE1, DD, BH, DV, S, BD1, BK1, BS, AY, FL, DE2,

Info for manual annotations of cluster AY:
•Start number 29 was manually annotated 3 times for cluster AY.

Info for manual annotations of cluster BD1:

•Start number 18 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BH:
•Start number 24 was manually annotated 1 time for cluster BH.

Info for manual annotations of cluster BK1:
•Start number 28 was manually annotated 5 times for cluster BK1.

Info for manual annotations of cluster BS:
•Start number 22 was manually annotated 2 times for cluster BS.

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

Info for manual annotations of cluster DE1:
•Start number 19 was manually annotated 1 time for cluster DE1.
•Start number 20 was manually annotated 8 times for cluster DE1.

Info for manual annotations of cluster DE2:
•Start number 33 was manually annotated 1 time for cluster DE2.

Info for manual annotations of cluster DO:
•Start number 24 was manually annotated 1 time for cluster DO.
•Start number 43 was manually annotated 1 time for cluster DO.

Info for manual annotations of cluster DV:
•Start number 36 was manually annotated 2 times for cluster DV.

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

Info for manual annotations of cluster S:
•Start number 25 was manually annotated 9 times for cluster S.
•Start number 32 was manually annotated 1 time for cluster S.

Gene Information:

Gene: Alone3_63 Start: 21624, Stop: 22094, Start Num: 22
Candidate Starts for Alone3_63:
(Start: 22 @21624 has 2 MA's), (31, 21660), (37, 21702), (55, 21816), (64, 21870), (65, 21873), (67, 21903), (75, 21969), (80, 22029), (82, 22053), (83, 22062), (86, 22074),

Gene: Auxilium_79 Start: 44205, Stop: 44636, Start Num: 29
Candidate Starts for Auxilium_79:
(23, 44190), (Start: 29 @44205 has 3 MA's), (44, 44313), (67, 44466), (68, 44469),

Gene: Beelzebub_55 Start: 29418, Stop: 29891, Start Num: 25
Candidate Starts for Beelzebub_55:
(Start: 25 @29418 has 9 MA's), (Start: 32 @29448 has 1 MA's), (40, 29529), (54, 29619), (66, 29694), (78, 29817), (84, 29856), (85, 29862),

Gene: Belphegor_34 Start: 32088, Stop: 31654, Start Num: 33
Candidate Starts for Belphegor_34:
(10, 32232), (12, 32220), (17, 32190), (Start: 33 @32088 has 1 MA's), (55, 31938), (57, 31935), (67, 31851), (68, 31848), (72, 31815), (79, 31728),

Gene: Blackbeetle_51 Start: 28464, Stop: 28937, Start Num: 25
Candidate Starts for Blackbeetle_51:
(Start: 25 @28464 has 9 MA's), (Start: 32 @28494 has 1 MA's), (40, 28575), (54, 28665), (66, 28740), (78, 28863), (84, 28902), (85, 28908),

Gene: BobBob_38 Start: 35578, Stop: 35108, Start Num: 20
Candidate Starts for BobBob_38:
(1, 35776), (2, 35767), (4, 35707), (7, 35698), (13, 35662), (Start: 20 @35578 has 8 MA's), (42, 35452), (46, 35434), (53, 35389), (58, 35371), (63, 35326), (67, 35290), (77, 35212),

Gene: Brandonk123_42 Start: 36713, Stop: 36243, Start Num: 20
Candidate Starts for Brandonk123_42:
(1, 36911), (2, 36902), (4, 36842), (7, 36833), (13, 36797), (Start: 20 @36713 has 8 MA's), (42, 36587), (46, 36569), (53, 36524), (58, 36506), (63, 36461), (67, 36425), (77, 36347),

Gene: Charming_41 Start: 36214, Stop: 35744, Start Num: 20
Candidate Starts for Charming_41:
(1, 36412), (2, 36403), (4, 36343), (7, 36334), (13, 36298), (Start: 20 @36214 has 8 MA's), (42, 36088), (46, 36070), (53, 36025), (58, 36007), (63, 35962), (67, 35926), (77, 35848),

Gene: CherryTomatoes_169 Start: 123046, Stop: 122573, Start Num: 24
Candidate Starts for CherryTomatoes_169:
(3, 123214), (6, 123169), (8, 123166), (Start: 24 @123046 has 2 MA's), (30, 123016), (41, 122929), (67, 122755), (75, 122689),

Gene: Clarkson_52 Start: 29146, Stop: 29619, Start Num: 25
Candidate Starts for Clarkson_52:
(Start: 25 @29146 has 9 MA's), (Start: 32 @29176 has 1 MA's), (40, 29257), (54, 29347), (66, 29422), (78, 29545), (84, 29584), (85, 29590),

Gene: DeluluLabubu_212 Start: 104650, Stop: 105126, Start Num: 28
Candidate Starts for DeluluLabubu_212:
(Start: 28 @104650 has 5 MA's), (48, 104794), (49, 104797), (59, 104845), (62, 104881), (71, 104959),

Gene: Emma1919_210 Start: 103175, Stop: 103651, Start Num: 28
Candidate Starts for Emma1919_210:
(Start: 28 @103175 has 5 MA's), (48, 103319), (49, 103322), (59, 103370), (62, 103406), (71, 103484),

Gene: EvePickles_81 Start: 47374, Stop: 47805, Start Num: 29
Candidate Starts for EvePickles_81:
(23, 47359), (Start: 29 @47374 has 3 MA's), (67, 47635), (68, 47638),

Gene: Forrest_210 Start: 104141, Stop: 104617, Start Num: 28
Candidate Starts for Forrest_210:
(Start: 28 @104141 has 5 MA's), (48, 104285), (49, 104288), (59, 104336), (62, 104372), (71, 104450),

Gene: Forrest_171 Start: 88900, Stop: 89394, Start Num: 28
Candidate Starts for Forrest_171:

(Start: 28 @88900 has 5 MA's), (45, 89029), (48, 89041), (61, 89119), (63, 89134), (67, 89170), (82, 89323), (88, 89368), (89, 89374),

Gene: GiJojo_54 Start: 20818, Stop: 21288, Start Num: 22
Candidate Starts for GiJojo_54:
(Start: 22 @20818 has 2 MA's), (31, 20854), (37, 20896), (55, 21010), (62, 21055), (64, 21064), (65, 21067), (67, 21097), (75, 21163), (80, 21223), (82, 21247), (83, 21256), (86, 21268),

Gene: Huphlepuff_53 Start: 28951, Stop: 29424, Start Num: 25
Candidate Starts for Huphlepuff_53:
(Start: 25 @28951 has 9 MA's), (Start: 32 @28981 has 1 MA's), (40, 29062), (54, 29152), (66, 29227), (78, 29350), (84, 29389), (85, 29395),

Gene: Jada_168 Start: 87596, Stop: 88090, Start Num: 28
Candidate Starts for Jada_168:
(Start: 28 @87596 has 5 MA's), (45, 87725), (48, 87737), (61, 87815), (63, 87830), (67, 87866), (82, 88019), (88, 88064), (89, 88070),

Gene: Jalebi_69 Start: 49016, Stop: 49408, Start Num: 36
Candidate Starts for Jalebi_69:
(34, 49013), (Start: 36 @49016 has 2 MA's), (55, 49139), (57, 49142), (65, 49196), (67, 49226), (73, 49262), (82, 49376),

Gene: JonJames_73 Start: 49905, Stop: 50405, Start Num: 19
Candidate Starts for JonJames_73:
(Start: 19 @49905 has 3 MA's), (39, 49998), (41, 50019), (50, 50073), (55, 50112), (65, 50169), (67, 50199), (74, 50253), (76, 50286), (82, 50361),

Gene: Lilbit_50 Start: 29147, Stop: 29620, Start Num: 25
Candidate Starts for Lilbit_50:
(Start: 25 @29147 has 9 MA's), (Start: 32 @29177 has 1 MA's), (40, 29258), (54, 29348), (66, 29423), (78, 29546), (84, 29585), (85, 29591),

Gene: LittleLaf_51 Start: 28906, Stop: 29349, Start Num: 32
Candidate Starts for LittleLaf_51:
(Start: 25 @28876 has 9 MA's), (Start: 32 @28906 has 1 MA's), (40, 28987), (54, 29077), (66, 29152), (78, 29275), (84, 29314), (85, 29320),

Gene: Love_44 Start: 37647, Stop: 37177, Start Num: 20
Candidate Starts for Love_44:
(1, 37845), (2, 37836), (4, 37776), (7, 37767), (13, 37731), (Start: 20 @37647 has 8 MA's), (42, 37521), (46, 37503), (53, 37458), (58, 37440), (63, 37395), (67, 37359), (77, 37281),

Gene: Marky_43 Start: 31173, Stop: 31622, Start Num: 24
Candidate Starts for Marky_43:
(Start: 24 @31173 has 2 MA's), (26, 31179), (27, 31182), (52, 31344), (57, 31359), (64, 31404), (66, 31428), (81, 31572),

Gene: Nabi_57 Start: 42255, Stop: 41725, Start Num: 18
Candidate Starts for Nabi_57:
(9, 42360), (15, 42315), (Start: 18 @42255 has 1 MA's), (38, 42147), (47, 42084), (60, 42000), (63, 41979), (69, 41940), (70, 41928), (74, 41898), (87, 41751), (88, 41745),

Gene: Nordenberg_35 Start: 35840, Stop: 35370, Start Num: 20
Candidate Starts for Nordenberg_35:
(1, 36038), (2, 36029), (4, 35969), (7, 35960), (13, 35924), (Start: 20 @35840 has 8 MA's), (42, 35714), (46, 35696), (53, 35651), (58, 35633), (63, 35588), (67, 35552), (77, 35474),

Gene: Paries_43 Start: 37309, Stop: 36839, Start Num: 20
Candidate Starts for Paries_43:
(1, 37507), (2, 37498), (4, 37438), (7, 37429), (13, 37393), (Start: 20 @37309 has 8 MA's), (42, 37183), (46, 37165), (53, 37120), (58, 37102), (63, 37057), (67, 37021), (77, 36943),

Gene: Phrank15_85 Start: 46952, Stop: 47386, Start Num: 29
Candidate Starts for Phrank15_85:
(23, 46937), (Start: 29 @46952 has 3 MA's), (35, 46988), (56, 47129), (67, 47213), (68, 47216),

Gene: Phredrick_212 Start: 102971, Stop: 103447, Start Num: 28
Candidate Starts for Phredrick_212:
(Start: 28 @102971 has 5 MA's), (48, 103115), (49, 103118), (59, 103166), (62, 103202), (71, 103280),

Gene: Poise_51 Start: 28464, Stop: 28937, Start Num: 25
Candidate Starts for Poise_51:
(Start: 25 @28464 has 9 MA's), (Start: 32 @28494 has 1 MA's), (40, 28575), (54, 28665), (66, 28740), (78, 28863), (84, 28902), (85, 28908),

Gene: Pringar_51 Start: 28752, Stop: 29225, Start Num: 25
Candidate Starts for Pringar_51:
(Start: 25 @28752 has 9 MA's), (Start: 32 @28782 has 1 MA's), (40, 28863), (54, 28953), (66, 29028), (78, 29151), (84, 29190), (85, 29196),

Gene: Pupper_168 Start: 123157, Stop: 122813, Start Num: 43
Candidate Starts for Pupper_168:
(5, 123403), (11, 123373), (30, 123241), (Start: 43 @123157 has 1 MA's), (44, 123151), (66, 123001),

Gene: Raela_51 Start: 29019, Stop: 29492, Start Num: 25
Candidate Starts for Raela_51:
(Start: 25 @29019 has 9 MA's), (Start: 32 @29049 has 1 MA's), (40, 29130), (54, 29220), (66, 29295), (78, 29418), (84, 29457), (85, 29463),

Gene: Rofo_41 Start: 36635, Stop: 36165, Start Num: 20
Candidate Starts for Rofo_41:
(1, 36833), (2, 36824), (4, 36764), (7, 36755), (13, 36719), (Start: 20 @36635 has 8 MA's), (42, 36509), (46, 36491), (53, 36446), (58, 36428), (63, 36383), (67, 36347), (77, 36269),

Gene: Sampudon_70 Start: 49016, Stop: 49408, Start Num: 36
Candidate Starts for Sampudon_70:
(34, 49013), (Start: 36 @49016 has 2 MA's), (55, 49139), (57, 49142), (65, 49196), (67, 49226), (73, 49262), (82, 49376),

Gene: Tangent_41 Start: 36226, Stop: 35756, Start Num: 20
Candidate Starts for Tangent_41:
(1, 36424), (2, 36415), (4, 36355), (7, 36346), (13, 36310), (Start: 20 @36226 has 8 MA's), (42, 36100), (46, 36082), (53, 36037), (58, 36019), (63, 35974), (67, 35938), (77, 35860),

Gene: VasuNzinga_51 Start: 28326, Stop: 28799, Start Num: 25

Candidate Starts for VasuNzinga_51:
(Start: 25 @28326 has 9 MA's), (Start: 32 @28356 has 1 MA's), (40, 28437), (54, 28527), (66, 28602), (78, 28725), (84, 28764), (85, 28770),

Gene: Vitus_38 Start: 31088, Stop: 31606, Start Num: 21
Candidate Starts for Vitus_38:
(Start: 21 @31088 has 1 MA's), (51, 31262), (75, 31457),

Gene: Vivi2_43 Start: 37381, Stop: 36914, Start Num: 19
Candidate Starts for Vivi2_43:
(14, 37450), (16, 37441), (Start: 19 @37381 has 3 MA's), (42, 37258), (46, 37240), (53, 37195), (58, 37177), (63, 37132), (67, 37096), (77, 37018),

Gene: Yvonnetastic_71 Start: 47446, Stop: 47946, Start Num: 19
Candidate Starts for Yvonnetastic_71:
(Start: 19 @47446 has 3 MA's), (39, 47539), (41, 47560), (50, 47614), (55, 47653), (65, 47710), (67, 47740), (74, 47794), (76, 47827), (82, 47902),