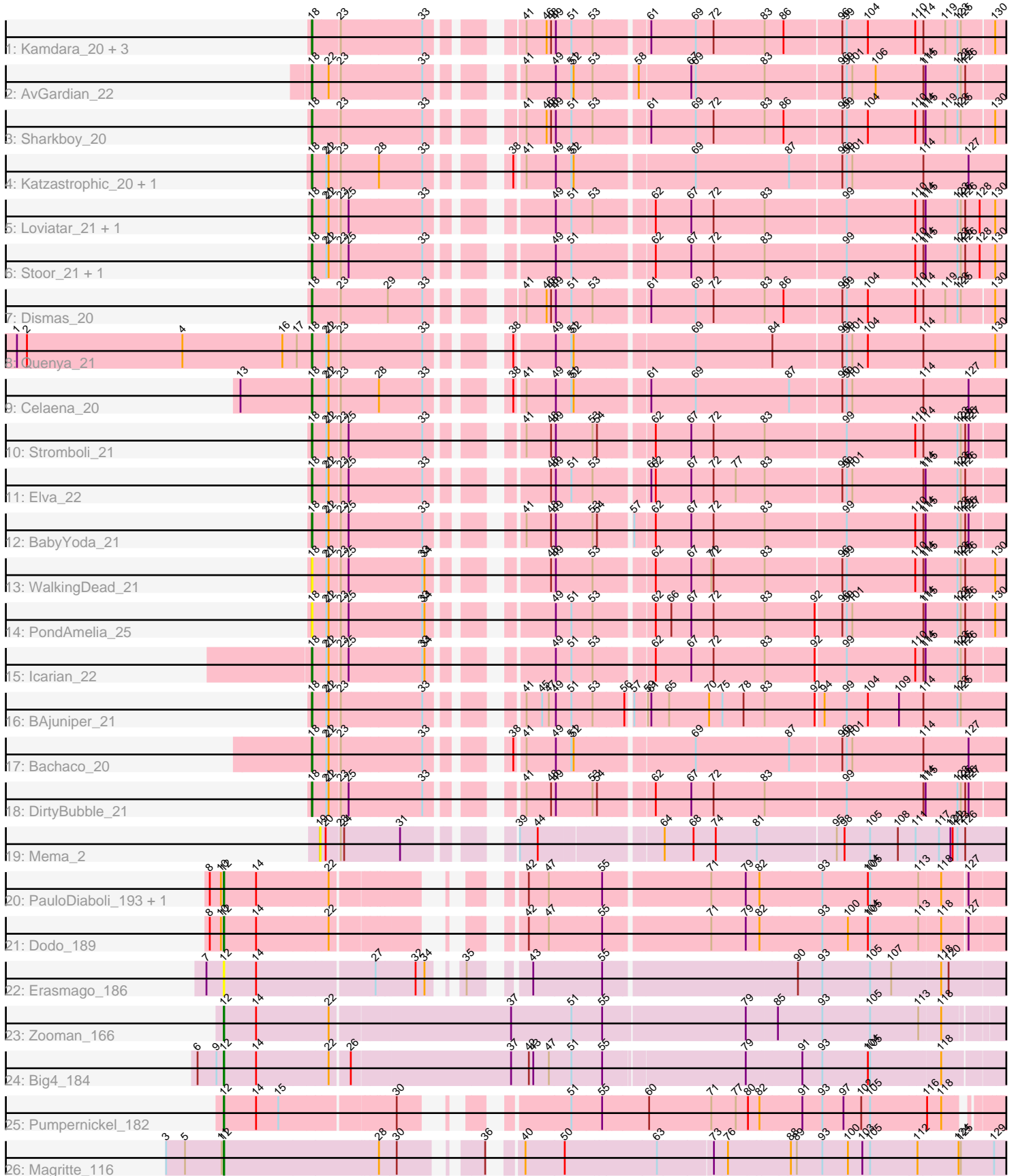


Pham 311846



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 311846 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311846 has 33 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Kamdara_20, Kieran_20, Rona_20, ChiliPepper_20
- Track 2 : AvGardian_22
- Track 3 : Sharkboy_20
- Track 4 : Katzastrophic_20, FlameThrower_20
- Track 5 : Loviatar_21, Akino08_20
- Track 6 : Stoor_21, SanaSana_22
- Track 7 : Dismas_20
- Track 8 : Quenya_21
- Track 9 : Celaena_20
- Track 10 : Stromboli_21
- Track 11 : Elva_22
- Track 12 : BabyYoda_21
- Track 13 : WalkingDead_21
- Track 14 : PondAmelia_25
- Track 15 : Icarian_22
- Track 16 : BAjuniper_21
- Track 17 : Bachaco_20
- Track 18 : DirtyBubble_21
- Track 19 : Mema_2
- Track 20 : PauloDiaboli_193, A3Wally_194
- Track 21 : Dodo_189
- Track 22 : Erasmago_186
- Track 23 : Zooman_166
- Track 24 : Big4_184
- Track 25 : Pumpernickel_182
- Track 26 : Magritte_116

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

The start number called the most often in the published annotations is 18, it was called in 21 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akino08_20, AvGardian_22, BAjuniper_21, BabyYoda_21, Bachaco_20, Celaena_20, ChiliPepper_20, DirtyBubble_21, Dismas_20, Elva_22, FlameThrower_20, Icarian_22, Kamdara_20, Katzastrophic_20, Kieran_20, Loviatar_21, PondAmelia_25, Quenya_21, Rona_20, SanaSana_22, Sharkboy_20, Stoor_21, Stromboli_21, WalkingDead_21,

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

-

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

- A3Wally_194, Big4_184, Dodo_189, Erasmago_186, Magritte_116, Mema_2, PauloDiaboli_193, Pumpernickel_182, Zooman_166,

Summary by start number:

Start 12:

- Found in 8 of 33 (24.2%) of genes in pham
- Manual Annotations of this start: 7 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_194 (GD1), Big4_184 (GD2), Dodo_189 (GD1), Erasmago_186 (GD2), Magritte_116 (singleton), PauloDiaboli_193 (GD1), Pumpernickel_182 (GD4), Zooman_166 (GD2),

Start 18:

- Found in 24 of 33 (72.7%) of genes in pham
- Manual Annotations of this start: 21 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akino08_20 (EB), AvGardian_22 (EB), BAjuniper_21 (EB), BabyYoda_21 (EB), Bachaco_20 (EB), Celaena_20 (EB), ChiliPepper_20 (EB), DirtyBubble_21 (EB), Dismas_20 (EB), Elva_22 (EB), FlameThrower_20 (EB), Icarian_22 (EB), Kamdara_20 (EB), Katzastrophic_20 (EB), Kieran_20 (EB), Loviatar_21 (EB), PondAmelia_25 (EB), Quenya_21 (EB), Rona_20 (EB), SanaSana_22 (EB), Sharkboy_20 (EB), Stoor_21 (EB), Stromboli_21 (EB), WalkingDead_21 (EB),

Start 19:

- Found in 1 of 33 (3.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mema_2 (EL),

Summary by clusters:

There are 6 clusters represented in this pham: EL, GD2, GD4, GD1, singleton, EB,

Info for manual annotations of cluster EB:

- Start number 18 was manually annotated 21 times for cluster EB.

Info for manual annotations of cluster GD1:

- Start number 12 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 12 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD4:

- Start number 12 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_194 Start: 104870, Stop: 106711, Start Num: 12

Candidate Starts for A3Wally_194:

(8, 104834), (10, 104864), (Start: 12 @104870 has 7 MA's), (14, 104957), (22, 105143), (42, 105464), (47, 105518), (55, 105656), (71, 105923), (79, 106016), (82, 106043), (93, 106202), (104, 106325), (105, 106331), (113, 106454), (118, 106508), (127, 106568),

Gene: Akino08_20 Start: 17703, Stop: 19409, Start Num: 18

Candidate Starts for Akino08_20:

(Start: 18 @17703 has 21 MA's), (21, 17739), (22, 17745), (23, 17772), (25, 17793), (33, 17988), (49, 18228), (51, 18270), (53, 18324), (62, 18465), (67, 18561), (72, 18621), (83, 18747), (99, 18957), (110, 19137), (114, 19158), (115, 19164), (123, 19248), (125, 19257), (126, 19269), (128, 19308), (130, 19344),

Gene: AvGardian_22 Start: 17320, Stop: 19014, Start Num: 18

Candidate Starts for AvGardian_22:

(Start: 18 @17320 has 21 MA's), (22, 17362), (23, 17389), (33, 17602), (41, 17764), (49, 17842), (51, 17884), (52, 17890), (53, 17938), (58, 18040), (67, 18175), (69, 18187), (83, 18364), (96, 18562), (99, 18574), (101, 18589), (106, 18649), (114, 18775), (115, 18781), (123, 18865), (125, 18874), (126, 18886),

Gene: BAjuniper_21 Start: 17796, Stop: 19490, Start Num: 18

Candidate Starts for BAjuniper_21:

(Start: 18 @17796 has 21 MA's), (21, 17832), (22, 17838), (23, 17865), (33, 18078), (41, 18240), (45, 18282), (47, 18300), (49, 18318), (51, 18360), (53, 18414), (56, 18495), (57, 18504), (59, 18534), (61, 18543), (65, 18591), (70, 18699), (75, 18735), (78, 18792), (83, 18837), (92, 18972), (94, 18990), (99, 19047), (104, 19101), (109, 19185), (114, 19248), (123, 19338), (125, 19347),

Gene: BabyYoda_21 Start: 17792, Stop: 19492, Start Num: 18

Candidate Starts for BabyYoda_21:

(Start: 18 @17792 has 21 MA's), (21, 17828), (22, 17834), (23, 17861), (25, 17882), (33, 18077), (41, 18239), (48, 18305), (49, 18317), (53, 18413), (54, 18425), (57, 18503), (62, 18554), (67, 18650), (72, 18710), (83, 18836), (99, 19046), (110, 19226), (114, 19247), (115, 19253), (123, 19337), (125, 19346), (126, 19358), (127, 19367),

Gene: Bachaco_20 Start: 17854, Stop: 19551, Start Num: 18

Candidate Starts for Bachaco_20:

(Start: 18 @17854 has 21 MA's), (21, 17890), (22, 17896), (23, 17923), (33, 18136), (38, 18277), (41, 18298), (49, 18376), (51, 18418), (52, 18424), (69, 18718), (87, 18958), (96, 19090), (99, 19102), (101, 19117), (114, 19303), (127, 19423),

Gene: Big4_184 Start: 100592, Stop: 102628, Start Num: 12

Candidate Starts for Big4_184:

(6, 100523), (9, 100574), (Start: 12 @100592 has 7 MA's), (14, 100679), (22, 100865), (26, 100913), (37, 101330), (42, 101378), (43, 101390), (47, 101432), (51, 101492), (55, 101570), (79, 101933), (91,

102065), (93, 102119), (104, 102242), (105, 102248), (118, 102425),

Gene: Celaena_20 Start: 17802, Stop: 19499, Start Num: 18

Candidate Starts for Celaena_20:

(13, 17610), (Start: 18 @17802 has 21 MA's), (21, 17838), (22, 17844), (23, 17871), (28, 17967), (33, 18084), (38, 18225), (41, 18246), (49, 18324), (51, 18366), (52, 18372), (61, 18546), (69, 18666), (87, 18906), (96, 19038), (99, 19050), (101, 19065), (114, 19251), (127, 19371),

Gene: ChiliPepper_20 Start: 17379, Stop: 19076, Start Num: 18

Candidate Starts for ChiliPepper_20:

(Start: 18 @17379 has 21 MA's), (23, 17448), (33, 17661), (41, 17829), (46, 17883), (48, 17895), (49, 17907), (51, 17949), (53, 18003), (61, 18132), (69, 18252), (72, 18300), (83, 18429), (86, 18480), (96, 18627), (99, 18639), (104, 18693), (110, 18819), (114, 18840), (119, 18897), (123, 18930), (125, 18939), (130, 19017),

Gene: DirtyBubble_21 Start: 17750, Stop: 19450, Start Num: 18

Candidate Starts for DirtyBubble_21:

(Start: 18 @17750 has 21 MA's), (21, 17786), (22, 17792), (23, 17819), (25, 17840), (33, 18035), (41, 18197), (48, 18263), (49, 18275), (53, 18371), (54, 18383), (62, 18512), (67, 18608), (72, 18668), (83, 18794), (99, 19004), (114, 19205), (115, 19211), (123, 19295), (125, 19304), (126, 19316), (127, 19325),

Gene: Dismas_20 Start: 17379, Stop: 19076, Start Num: 18

Candidate Starts for Dismas_20:

(Start: 18 @17379 has 21 MA's), (23, 17448), (29, 17568), (33, 17661), (41, 17829), (46, 17883), (48, 17895), (49, 17907), (51, 17949), (53, 18003), (61, 18132), (69, 18252), (72, 18300), (83, 18429), (86, 18480), (96, 18627), (99, 18639), (104, 18693), (110, 18819), (114, 18840), (119, 18897), (123, 18930), (125, 18939), (130, 19017),

Gene: Dodo_189 Start: 104481, Stop: 106322, Start Num: 12

Candidate Starts for Dodo_189:

(8, 104445), (10, 104475), (Start: 12 @104481 has 7 MA's), (14, 104568), (22, 104754), (42, 105075), (47, 105129), (55, 105267), (71, 105534), (79, 105627), (82, 105654), (93, 105813), (100, 105882), (104, 105936), (105, 105942), (113, 106065), (118, 106119), (127, 106179),

Gene: Elva_22 Start: 17711, Stop: 19414, Start Num: 18

Candidate Starts for Elva_22:

(Start: 18 @17711 has 21 MA's), (21, 17747), (22, 17753), (23, 17780), (25, 17801), (33, 17996), (48, 18224), (49, 18236), (51, 18278), (53, 18332), (61, 18461), (62, 18473), (67, 18569), (72, 18629), (77, 18689), (83, 18758), (96, 18956), (99, 18968), (101, 18983), (114, 19169), (115, 19175), (123, 19259), (125, 19268), (126, 19280),

Gene: Erasmago_186 Start: 100817, Stop: 102727, Start Num: 12

Candidate Starts for Erasmago_186:

(7, 100772), (Start: 12 @100817 has 7 MA's), (14, 100904), (27, 101204), (32, 101303), (34, 101327), (35, 101372), (43, 101480), (55, 101660), (90, 102143), (93, 102209), (105, 102338), (107, 102395), (118, 102515), (120, 102533),

Gene: FlameThrower_20 Start: 17318, Stop: 19009, Start Num: 18

Candidate Starts for FlameThrower_20:

(Start: 18 @17318 has 21 MA's), (21, 17354), (22, 17360), (23, 17387), (28, 17483), (33, 17600), (38, 17741), (41, 17762), (49, 17840), (51, 17882), (52, 17888), (69, 18182), (87, 18422), (96, 18554), (99, 18566), (101, 18581), (114, 18767), (127, 18887),

Gene: Icarian_22 Start: 17629, Stop: 19329, Start Num: 18

Candidate Starts for Icarian_22:

(Start: 18 @17629 has 21 MA's), (21, 17665), (22, 17671), (23, 17698), (25, 17719), (33, 17914), (34, 17920), (49, 18154), (51, 18196), (53, 18250), (62, 18391), (67, 18487), (72, 18547), (83, 18673), (92, 18808), (99, 18883), (110, 19063), (114, 19084), (115, 19090), (123, 19174), (125, 19183), (126, 19195),

Gene: Kamdara_20 Start: 17378, Stop: 19075, Start Num: 18

Candidate Starts for Kamdara_20:

(Start: 18 @17378 has 21 MA's), (23, 17447), (33, 17660), (41, 17828), (46, 17882), (48, 17894), (49, 17906), (51, 17948), (53, 18002), (61, 18131), (69, 18251), (72, 18299), (83, 18428), (86, 18479), (96, 18626), (99, 18638), (104, 18692), (110, 18818), (114, 18839), (119, 18896), (123, 18929), (125, 18938), (130, 19016),

Gene: Katzastrophic_20 Start: 17460, Stop: 19157, Start Num: 18

Candidate Starts for Katzastrophic_20:

(Start: 18 @17460 has 21 MA's), (21, 17496), (22, 17502), (23, 17529), (28, 17625), (33, 17742), (38, 17883), (41, 17904), (49, 17982), (51, 18024), (52, 18030), (69, 18324), (87, 18564), (96, 18696), (99, 18708), (101, 18723), (114, 18909), (127, 19029),

Gene: Kieran_20 Start: 17382, Stop: 19079, Start Num: 18

Candidate Starts for Kieran_20:

(Start: 18 @17382 has 21 MA's), (23, 17451), (33, 17664), (41, 17832), (46, 17886), (48, 17898), (49, 17910), (51, 17952), (53, 18006), (61, 18135), (69, 18255), (72, 18303), (83, 18432), (86, 18483), (96, 18630), (99, 18642), (104, 18696), (110, 18822), (114, 18843), (119, 18900), (123, 18933), (125, 18942), (130, 19020),

Gene: Loviatar_21 Start: 17718, Stop: 19424, Start Num: 18

Candidate Starts for Loviatar_21:

(Start: 18 @17718 has 21 MA's), (21, 17754), (22, 17760), (23, 17787), (25, 17808), (33, 18003), (49, 18243), (51, 18285), (53, 18339), (62, 18480), (67, 18576), (72, 18636), (83, 18762), (99, 18972), (110, 19152), (114, 19173), (115, 19179), (123, 19263), (125, 19272), (126, 19284), (128, 19323), (130, 19359),

Gene: Magritte_116 Start: 73737, Stop: 75686, Start Num: 12

Candidate Starts for Magritte_116:

(3, 73581), (5, 73632), (11, 73731), (Start: 12 @73737 has 7 MA's), (28, 74145), (30, 74187), (36, 74343), (40, 74388), (50, 74493), (63, 74730), (73, 74868), (76, 74904), (88, 75060), (89, 75075), (93, 75144), (100, 75213), (103, 75252), (105, 75273), (112, 75396), (124, 75504), (125, 75510), (129, 75600),

Gene: Mema_2 Start: 344, Stop: 2047, Start Num: 19

Candidate Starts for Mema_2:

(19, 344), (20, 356), (23, 389), (24, 398), (31, 539), (39, 743), (44, 788), (64, 1085), (68, 1163), (74, 1223), (81, 1334), (95, 1538), (98, 1559), (105, 1625), (108, 1700), (111, 1748), (117, 1811), (121, 1841), (122, 1847), (123, 1859), (126, 1880),

Gene: PauloDiaboli_193 Start: 102916, Stop: 104757, Start Num: 12

Candidate Starts for PauloDiaboli_193:

(8, 102880), (10, 102910), (Start: 12 @102916 has 7 MA's), (14, 103003), (22, 103189), (42, 103510), (47, 103564), (55, 103702), (71, 103969), (79, 104062), (82, 104089), (93, 104248), (104, 104371), (105, 104377), (113, 104500), (118, 104554), (127, 104614),

Gene: PondAmelia_25 Start: 17770, Stop: 19464, Start Num: 18

Candidate Starts for PondAmelia_25:

(Start: 18 @17770 has 21 MA's), (21, 17806), (22, 17812), (23, 17839), (25, 17860), (33, 18055), (34, 18061), (49, 18295), (51, 18337), (53, 18391), (62, 18532), (66, 18574), (67, 18628), (72, 18688), (83, 18814), (92, 18949), (96, 19012), (99, 19024), (101, 19039), (114, 19225), (115, 19231), (123, 19315), (125, 19324), (126, 19336), (130, 19405),

Gene: Pumpernickel_182 Start: 102595, Stop: 104433, Start Num: 12

Candidate Starts for Pumpernickel_182:

(Start: 12 @102595 has 7 MA's), (14, 102682), (15, 102742), (30, 103027), (51, 103309), (55, 103387), (60, 103510), (71, 103678), (77, 103744), (80, 103774), (82, 103798), (91, 103903), (93, 103957), (97, 104014), (102, 104062), (105, 104086), (116, 104227), (118, 104263),

Gene: Quenya_21 Start: 17325, Stop: 19022, Start Num: 18

Candidate Starts for Quenya_21:

(1, 16533), (2, 16560), (4, 16980), (16, 17250), (17, 17289), (Start: 18 @17325 has 21 MA's), (21, 17361), (22, 17367), (23, 17394), (33, 17607), (38, 17748), (49, 17847), (51, 17889), (52, 17895), (69, 18189), (84, 18384), (96, 18561), (99, 18573), (101, 18588), (104, 18627), (114, 18774), (130, 18957),

Gene: Rona_20 Start: 17379, Stop: 19076, Start Num: 18

Candidate Starts for Rona_20:

(Start: 18 @17379 has 21 MA's), (23, 17448), (33, 17661), (41, 17829), (46, 17883), (48, 17895), (49, 17907), (51, 17949), (53, 18003), (61, 18132), (69, 18252), (72, 18300), (83, 18429), (86, 18480), (96, 18627), (99, 18639), (104, 18693), (110, 18819), (114, 18840), (119, 18897), (123, 18930), (125, 18939), (130, 19017),

Gene: SanaSana_22 Start: 17657, Stop: 19363, Start Num: 18

Candidate Starts for SanaSana_22:

(Start: 18 @17657 has 21 MA's), (21, 17693), (22, 17699), (23, 17726), (25, 17747), (33, 17942), (49, 18182), (51, 18224), (62, 18419), (67, 18515), (72, 18575), (83, 18701), (99, 18911), (110, 19091), (114, 19112), (115, 19118), (123, 19202), (125, 19211), (126, 19223), (128, 19262), (130, 19298),

Gene: Sharkboy_20 Start: 17366, Stop: 19063, Start Num: 18

Candidate Starts for Sharkboy_20:

(Start: 18 @17366 has 21 MA's), (23, 17435), (33, 17648), (41, 17816), (46, 17870), (48, 17882), (49, 17894), (51, 17936), (53, 17990), (61, 18119), (69, 18239), (72, 18287), (83, 18416), (86, 18467), (96, 18614), (99, 18626), (104, 18680), (110, 18806), (114, 18827), (115, 18833), (119, 18884), (123, 18917), (125, 18926), (130, 19004),

Gene: Stoor_21 Start: 17654, Stop: 19360, Start Num: 18

Candidate Starts for Stoor_21:

(Start: 18 @17654 has 21 MA's), (21, 17690), (22, 17696), (23, 17723), (25, 17744), (33, 17939), (49, 18179), (51, 18221), (62, 18416), (67, 18512), (72, 18572), (83, 18698), (99, 18908), (110, 19088), (114, 19109), (115, 19115), (123, 19199), (125, 19208), (126, 19220), (128, 19259), (130, 19295),

Gene: Stromboli_21 Start: 17790, Stop: 19490, Start Num: 18

Candidate Starts for Stromboli_21:

(Start: 18 @17790 has 21 MA's), (21, 17826), (22, 17832), (23, 17859), (25, 17880), (33, 18075), (41, 18237), (48, 18303), (49, 18315), (53, 18411), (54, 18423), (62, 18552), (67, 18648), (72, 18708), (83, 18834), (99, 19044), (110, 19224), (114, 19245), (123, 19335), (125, 19344), (126, 19356), (127, 19365),

Gene: WalkingDead_21 Start: 17782, Stop: 19479, Start Num: 18

Candidate Starts for WalkingDead_21:

(Start: 18 @17782 has 21 MA's), (21, 17818), (22, 17824), (23, 17851), (25, 17872), (33, 18067), (34, 18073), (48, 18295), (49, 18307), (53, 18403), (62, 18544), (67, 18640), (71, 18694), (72, 18700), (83, 18823), (96, 19021), (99, 19033), (110, 19213), (114, 19234), (115, 19240), (123, 19324), (125, 19333), (126, 19345), (130, 19420),

Gene: Zooman_166 Start: 97329, Stop: 99359, Start Num: 12

Candidate Starts for Zooman_166:

(Start: 12 @97329 has 7 MA's), (14, 97416), (22, 97602), (37, 98067), (51, 98229), (55, 98307), (79, 98679), (85, 98748), (93, 98865), (105, 98994), (113, 99117), (118, 99171),