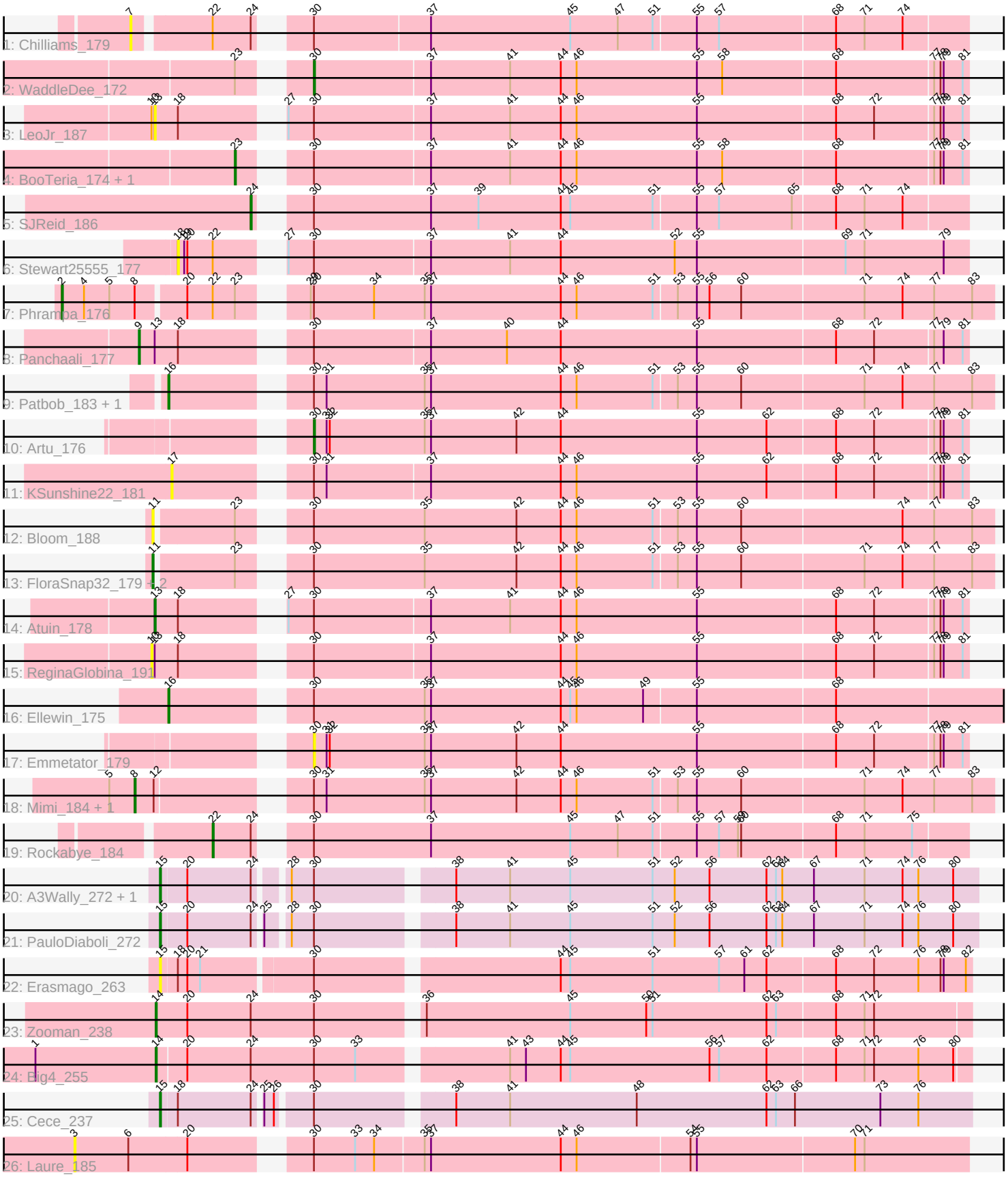
Pham 333069


1: Chilliams_179
2: WaddleDee_172
3: LeoJr_187
4: BooTeria_174 + 1
5: SJReid_186
6: Stewart25555_177
7: Phramba_176
8: Panchaali_177
9: Patbob_183 + 1
10: Artu_176
11: KSunshine22_181
12: Bloom_188
13: FloraSnap32_179 + 2
14: Atuin_178
15: ReginaGlobina_191
16: Ellewin_175
17: Emmetator_179
18: Mimi_184 + 1
19: Rockabye_184
20: A3Wally_272 + 1
21: PauloDiaboli_272
22: Erasmago_263
23: Zooman_238
24: Big4_255
25: Cece_237
26: Laure_185

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 333069 Report

This analysis was run 11/14/26 on database version 672.

Pham number 333069 has 32 members, 9 are drafts.

Phages represented in each track:
- Track 1 : Chilliams_179
- Track 2 : WaddleDee_172
- Track 3 : LeoJr_187
- Track 4 : BooTeria_174, DunneganBoMo_175
- Track 5 : SJReid_186
- Track 6 : Stewart25555_177
- Track 7 : Phrampa_176
- Track 8 : Panchaali_177
- Track 9 : Patbob_183, GoldenEssence_172
- Track 10 : Artu_176
- Track 11 : KSunshine22_181
- Track 12 : Bloom_188
- Track 13 : FloraSnap32_179, Racecar_185, Talia1610_185
- Track 14 : Atuin_178
- Track 15 : ReginaGlobina_191
- Track 16 : Ellewin_175
- Track 17 : Emmetator_179
- Track 18 : Mimi_184, FrostedClock_185
- Track 19 : Rockabye_184
- Track 20 : A3Wally_272, Dodo_267
- Track 21 : PauloDiaboli_272
- Track 22 : Erasmago_263
- Track 23 : Zooman_238
- Track 24 : Big4_255
- Track 25 : Cece_237
- Track 26 : Laure_185

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 4 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- A3Wally_272, Cece_237, Dodo_267, Erasmago_263, PauloDiaboli_272,

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

Genes that do not have the "Most Annotated" start:
• Artu_176, Atuin_178, Big4_255, Bloom_188, BooTeria_174, Chilliams_179, DunneganBoMo_175, Ellewin_175, Emmetator_179, FloraSnap32_179, FrostedClock_185, GoldenEssence_172, KSunshine22_181, Laure_185, LeoJr_187, Mimi_184, Panchaali_177, Patbob_183, Phrampa_176, Racecar_185, ReginaGlobina_191, Rockabye_184, SJReid_186, Stewart25555_177, Talia1610_185, WaddleDee_172, Zooman_238,

Summary by start number:

Start 2:
• Found in 1 of 32 (3.1%) of genes in pham
• Manual Annotations of this start: 1 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phrampa_176 (FC),

Start 3:
• Found in 1 of 32 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Laure_185 (UNK),

Start 7:
• Found in 1 of 32 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chilliams_179 (FC),

Start 8:
• Found in 3 of 32 (9.4%) of genes in pham
• Manual Annotations of this start: 2 of 23
• Called 66.7% of time when present
• Phage (with cluster) where this start called: FrostedClock_185 (FC), Mimi_184 (FC),

Start 9:
• Found in 1 of 32 (3.1%) of genes in pham
• Manual Annotations of this start: 1 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Panchaali_177 (FC),

Start 10:
• Found in 2 of 32 (6.2%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: ReginaGlobina_191 (FC),

Start 11:
• Found in 4 of 32 (12.5%) of genes in pham
• Manual Annotations of this start: 3 of 23

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bloom_188 (FC), FloraSnap32_179 (FC), Racecar_185 (FC), Talia1610_185 (FC),

Start 13:
• Found in 4 of 32 (12.5%) of genes in pham
• Manual Annotations of this start: 1 of 23
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Atuin_178 (FC), LeoJr_187 (FC),

Start 14:
• Found in 2 of 32 (6.2%) of genes in pham
• Manual Annotations of this start: 2 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Big4_255 (GD2), Zooman_238 (GD2),

Start 15:
• Found in 5 of 32 (15.6%) of genes in pham
• Manual Annotations of this start: 4 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A3Wally_272 (GD1), Cece_237 (GD3), Dodo_267 (GD1), Erasmago_263 (GD2), PauloDiaboli_272 (GD1),

Start 16:
• Found in 3 of 32 (9.4%) of genes in pham
• Manual Annotations of this start: 3 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ellewin_175 (FC), GoldenEssence_172 (FC), Patbob_183 (FC),

Start 17:
• Found in 1 of 32 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: KSunshine22_181 (FC),

Start 18:
• Found in 7 of 32 (21.9%) of genes in pham
• No Manual Annotations of this start.
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Stewart25555_177 (FC),

Start 22:
• Found in 4 of 32 (12.5%) of genes in pham
• Manual Annotations of this start: 1 of 23
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Rockabye_184 (FC),

Start 23:
• Found in 8 of 32 (25.0%) of genes in pham
• Manual Annotations of this start: 2 of 23
• Called 25.0% of time when present

• Phage (with cluster) where this start called: BooTeria_174 (FC), DunneganBoMo_175 (FC),

Start 24:
• Found in 9 of 32 (28.1%) of genes in pham
• Manual Annotations of this start: 1 of 23
• Called 11.1% of time when present
• Phage (with cluster) where this start called: SJReid_186 (FC),

Start 30:
• Found in 32 of 32 (100.0%) of genes in pham
• Manual Annotations of this start: 2 of 23
• Called 9.4% of time when present
• Phage (with cluster) where this start called: Artu_176 (FC), Emmetator_179 (FC), WaddleDee_172 (FC),

Summary by clusters:

There are 5 clusters represented in this pham: GD3, GD1, GD2, FC, UNK,

Info for manual annotations of cluster FC:
•Start number 2 was manually annotated 1 time for cluster FC.
•Start number 8 was manually annotated 2 times for cluster FC.
•Start number 9 was manually annotated 1 time for cluster FC.
•Start number 11 was manually annotated 3 times for cluster FC.
•Start number 13 was manually annotated 1 time for cluster FC.
•Start number 16 was manually annotated 3 times for cluster FC.
•Start number 22 was manually annotated 1 time for cluster FC.
•Start number 23 was manually annotated 2 times for cluster FC.
•Start number 24 was manually annotated 1 time for cluster FC.
•Start number 30 was manually annotated 2 times for cluster FC.

Info for manual annotations of cluster GD1:
•Start number 15 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 14 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 15 was manually annotated 1 time for cluster GD3.

Gene Information:

Gene: A3Wally_272 Start: 149259, Stop: 149999, Start Num: 15
Candidate Starts for A3Wally_272:
(Start: 15 @149259 has 4 MA's), (20, 149283), (Start: 24 @149343 has 1 MA's), (28, 149367), (Start: 30 @149388 has 2 MA's), (38, 149505), (41, 149556), (45, 149613), (51, 149691), (52, 149712), (56, 149745), (62, 149799), (63, 149808), (64, 149814), (67, 149844), (71, 149892), (74, 149928), (76, 149943), (80, 149976),

Gene: Artu_176 Start: 120992, Stop: 121606, Start Num: 30
Candidate Starts for Artu_176:
(Start: 30 @120992 has 2 MA's), (31, 121004), (32, 121007), (35, 121097), (37, 121103), (42, 121184), (44, 121226), (55, 121355), (62, 121421), (68, 121484), (72, 121520), (77, 121574), (78, 121580), (79, 121583), (81, 121601),

Gene: Atuin_178 Start: 122904, Stop: 123635, Start Num: 13
Candidate Starts for Atuin_178:
(Start: 13 @122904 has 1 MA's), (18, 122925), (27, 123000), (Start: 30 @123024 has 2 MA's), (37, 123132), (41, 123207), (44, 123255), (46, 123270), (55, 123384), (68, 123513), (72, 123549), (77, 123603), (78, 123609), (79, 123612), (81, 123630),

Gene: Big4_255 Start: 145830, Stop: 146576, Start Num: 14
Candidate Starts for Big4_255:
(1, 145716), (Start: 14 @145830 has 2 MA's), (20, 145857), (Start: 24 @145917 has 1 MA's), (Start: 30 @145977 has 2 MA's), (33, 146016), (41, 146145), (43, 146160), (44, 146193), (45, 146202), (56, 146334), (57, 146343), (62, 146388), (68, 146451), (71, 146478), (72, 146487), (76, 146529), (80, 146562),

Gene: Bloom_188 Start: 122403, Stop: 123155, Start Num: 11
Candidate Starts for Bloom_188:
(Start: 11 @122403 has 3 MA's), (Start: 23 @122472 has 2 MA's), (Start: 30 @122517 has 2 MA's), (35, 122622), (42, 122709), (44, 122751), (46, 122766), (51, 122838), (53, 122859), (55, 122877), (60, 122919), (74, 123069), (77, 123099), (83, 123135),

Gene: BooTeria_174 Start: 120477, Stop: 121133, Start Num: 23
Candidate Starts for BooTeria_174:
(Start: 23 @120477 has 2 MA's), (Start: 30 @120522 has 2 MA's), (37, 120630), (41, 120705), (44, 120753), (46, 120768), (55, 120882), (58, 120906), (68, 121011), (77, 121101), (78, 121107), (79, 121110), (81, 121128),

Gene: Cece_237 Start: 142427, Stop: 143161, Start Num: 15
Candidate Starts for Cece_237:
(Start: 15 @142427 has 4 MA's), (18, 142442), (Start: 24 @142511 has 1 MA's), (25, 142517), (26, 142526), (Start: 30 @142556 has 2 MA's), (38, 142673), (41, 142724), (48, 142844), (62, 142967), (63, 142976), (66, 142994), (73, 143075), (76, 143111),

Gene: Chilliams_179 Start: 112393, Stop: 113133, Start Num: 7
Candidate Starts for Chilliams_179:
(7, 112393), (Start: 22 @112459 has 1 MA's), (Start: 24 @112495 has 1 MA's), (Start: 30 @112525 has 2 MA's), (37, 112633), (45, 112765), (47, 112810), (51, 112843), (55, 112882), (57, 112903), (68, 113011), (71, 113038), (74, 113074),

Gene: Dodo_267 Start: 148943, Stop: 149683, Start Num: 15
Candidate Starts for Dodo_267:
(Start: 15 @148943 has 4 MA's), (20, 148967), (Start: 24 @149027 has 1 MA's), (28, 149051), (Start: 30 @149072 has 2 MA's), (38, 149189), (41, 149240), (45, 149297), (51, 149375), (52, 149396), (56, 149429), (62, 149483), (63, 149492), (64, 149498), (67, 149528), (71, 149576), (74, 149612), (76, 149627), (80, 149660),

Gene: DunneganBoMo_175 Start: 119659, Stop: 120315, Start Num: 23
Candidate Starts for DunneganBoMo_175:

(Start: 23 @119659 has 2 MA's), (Start: 30 @119704 has 2 MA's), (37, 119812), (41, 119887), (44, 119935), (46, 119950), (55, 120064), (58, 120088), (68, 120193), (77, 120283), (78, 120289), (79, 120292), (81, 120310),

Gene: Ellewin_175 Start: 119642, Stop: 120400, Start Num: 16
Candidate Starts for Ellewin_175:
(Start: 16 @119642 has 3 MA's), (Start: 30 @119750 has 2 MA's), (35, 119855), (37, 119861), (44, 119984), (45, 119993), (46, 119999), (49, 120062), (55, 120110), (68, 120239),

Gene: Emmetator_179 Start: 119916, Stop: 120530, Start Num: 30
Candidate Starts for Emmetator_179:
(Start: 30 @119916 has 2 MA's), (31, 119928), (32, 119931), (35, 120021), (37, 120027), (42, 120108), (44, 120150), (55, 120279), (68, 120408), (72, 120444), (77, 120498), (78, 120504), (79, 120507), (81, 120525),

Gene: Erasmago_263 Start: 146579, Stop: 147316, Start Num: 15
Candidate Starts for Erasmago_263:
(Start: 15 @146579 has 4 MA's), (18, 146594), (20, 146603), (21, 146615), (Start: 30 @146714 has 2 MA's), (44, 146930), (45, 146939), (51, 147017), (57, 147080), (61, 147104), (62, 147125), (68, 147188), (72, 147224), (76, 147266), (78, 147287), (79, 147290), (82, 147311),

Gene: FloraSnap32_179 Start: 120734, Stop: 121486, Start Num: 11
Candidate Starts for FloraSnap32_179:
(Start: 11 @120734 has 3 MA's), (Start: 23 @120803 has 2 MA's), (Start: 30 @120848 has 2 MA's), (35, 120953), (42, 121040), (44, 121082), (46, 121097), (51, 121169), (53, 121190), (55, 121208), (60, 121250), (71, 121364), (74, 121400), (77, 121430), (83, 121466),

Gene: FrostedClock_185 Start: 123043, Stop: 123816, Start Num: 8
Candidate Starts for FrostedClock_185:
(5, 123019), (Start: 8 @123043 has 2 MA's), (12, 123061), (Start: 30 @123178 has 2 MA's), (31, 123190), (35, 123283), (37, 123289), (42, 123370), (44, 123412), (46, 123427), (51, 123499), (53, 123520), (55, 123538), (60, 123580), (71, 123694), (74, 123730), (77, 123760), (83, 123796),

Gene: GoldenEssence_172 Start: 116618, Stop: 117364, Start Num: 16
Candidate Starts for GoldenEssence_172:
(Start: 16 @116618 has 3 MA's), (Start: 30 @116726 has 2 MA's), (31, 116738), (35, 116831), (37, 116837), (44, 116960), (46, 116975), (51, 117047), (53, 117068), (55, 117086), (60, 117128), (71, 117242), (74, 117278), (77, 117308), (83, 117344),

Gene: KSunshine22_181 Start: 121375, Stop: 122091, Start Num: 17
Candidate Starts for KSunshine22_181:
(17, 121375), (Start: 30 @121480 has 2 MA's), (31, 121492), (37, 121588), (44, 121711), (46, 121726), (55, 121840), (62, 121906), (68, 121969), (72, 122005), (77, 122059), (78, 122065), (79, 122068), (81, 122086),

Gene: Laure_185 Start: 114097, Stop: 114903, Start Num: 3
Candidate Starts for Laure_185:
(3, 114097), (6, 114148), (20, 114202), (Start: 30 @114292 has 2 MA's), (33, 114331), (34, 114349), (35, 114394), (37, 114400), (44, 114523), (46, 114538), (54, 114643), (55, 114649), (70, 114796), (71, 114805),

Gene: LeoJr_187 Start: 123458, Stop: 124189, Start Num: 13
Candidate Starts for LeoJr_187:

(10, 123455), (Start: 13 @123458 has 1 MA's), (18, 123479), (27, 123554), (Start: 30 @123578 has 2 MA's), (37, 123686), (41, 123761), (44, 123809), (46, 123824), (55, 123938), (68, 124067), (72, 124103), (77, 124157), (78, 124163), (79, 124166), (81, 124184),

Gene: Mimi_184 Start: 122095, Stop: 122868, Start Num: 8
Candidate Starts for Mimi_184:
(5, 122071), (Start: 8 @122095 has 2 MA's), (12, 122113), (Start: 30 @122230 has 2 MA's), (31, 122242), (35, 122335), (37, 122341), (42, 122422), (44, 122464), (46, 122479), (51, 122551), (53, 122572), (55, 122590), (60, 122632), (71, 122746), (74, 122782), (77, 122812), (83, 122848),

Gene: Panchaali_177 Start: 120585, Stop: 121331, Start Num: 9
Candidate Starts for Panchaali_177:
(Start: 9 @120585 has 1 MA's), (Start: 13 @120600 has 1 MA's), (18, 120621), (Start: 30 @120720 has 2 MA's), (37, 120828), (40, 120900), (44, 120951), (55, 121080), (68, 121209), (72, 121245), (77, 121299), (79, 121308), (81, 121326),

Gene: Patbob_183 Start: 123234, Stop: 123980, Start Num: 16
Candidate Starts for Patbob_183:
(Start: 16 @123234 has 3 MA's), (Start: 30 @123342 has 2 MA's), (31, 123354), (35, 123447), (37, 123453), (44, 123576), (46, 123591), (51, 123663), (53, 123684), (55, 123702), (60, 123744), (71, 123858), (74, 123894), (77, 123924), (83, 123960),

Gene: PauloDiaboli_272 Start: 146458, Stop: 147198, Start Num: 15
Candidate Starts for PauloDiaboli_272:
(Start: 15 @146458 has 4 MA's), (20, 146482), (Start: 24 @146542 has 1 MA's), (25, 146548), (28, 146566), (Start: 30 @146587 has 2 MA's), (38, 146704), (41, 146755), (45, 146812), (51, 146890), (52, 146911), (56, 146944), (62, 146998), (63, 147007), (64, 147013), (67, 147043), (71, 147091), (74, 147127), (76, 147142), (80, 147175),

Gene: Phrampa_176 Start: 124184, Stop: 125023, Start Num: 2
Candidate Starts for Phrampa_176:
(Start: 2 @124184 has 1 MA's), (4, 124205), (5, 124229), (Start: 8 @124253 has 2 MA's), (20, 124295), (Start: 22 @124319 has 1 MA's), (Start: 23 @124340 has 2 MA's), (29, 124382), (Start: 30 @124385 has 2 MA's), (34, 124442), (35, 124490), (37, 124496), (44, 124619), (46, 124634), (51, 124706), (53, 124727), (55, 124745), (56, 124757), (60, 124787), (71, 124901), (74, 124937), (77, 124967), (83, 125003),

Gene: Racecar_185 Start: 122996, Stop: 123748, Start Num: 11
Candidate Starts for Racecar_185:
(Start: 11 @122996 has 3 MA's), (Start: 23 @123065 has 2 MA's), (Start: 30 @123110 has 2 MA's), (35, 123215), (42, 123302), (44, 123344), (46, 123359), (51, 123431), (53, 123452), (55, 123470), (60, 123512), (71, 123626), (74, 123662), (77, 123692), (83, 123728),

Gene: ReginaGlobina_191 Start: 124724, Stop: 125458, Start Num: 10
Candidate Starts for ReginaGlobina_191:
(10, 124724), (Start: 13 @124727 has 1 MA's), (18, 124748), (Start: 30 @124847 has 2 MA's), (37, 124955), (44, 125078), (46, 125093), (55, 125207), (68, 125336), (72, 125372), (77, 125426), (78, 125432), (79, 125435), (81, 125453),

Gene: Rockabye_184 Start: 114368, Stop: 115045, Start Num: 22
Candidate Starts for Rockabye_184:
(Start: 22 @114368 has 1 MA's), (Start: 24 @114404 has 1 MA's), (Start: 30 @114434 has 2 MA's), (37, 114545), (45, 114677), (47, 114722), (51, 114755), (55, 114794), (57, 114815), (59, 114833), (60,

114836), (68, 114923), (71, 114950), (75, 114995),

Gene: SJReid_186 Start: 112490, Stop: 113131, Start Num: 24
Candidate Starts for SJReid_186:
(Start: 24 @112490 has 1 MA's), (Start: 30 @112520 has 2 MA's), (37, 112631), (39, 112676), (44, 112754), (45, 112763), (51, 112841), (55, 112880), (57, 112901), (65, 112970), (68, 113009), (71, 113036), (74, 113072),

Gene: Stewart25555_177 Start: 122261, Stop: 122974, Start Num: 18
Candidate Starts for Stewart25555_177:
(18, 122261), (19, 122267), (20, 122270), (Start: 22 @122294 has 1 MA's), (27, 122336), (Start: 30 @122360 has 2 MA's), (37, 122468), (41, 122543), (44, 122591), (52, 122699), (55, 122720), (69, 122858), (71, 122876), (79, 122951),

Gene: Talia1610_185 Start: 122413, Stop: 123165, Start Num: 11
Candidate Starts for Talia1610_185:
(Start: 11 @122413 has 3 MA's), (Start: 23 @122482 has 2 MA's), (Start: 30 @122527 has 2 MA's), (35, 122632), (42, 122719), (44, 122761), (46, 122776), (51, 122848), (53, 122869), (55, 122887), (60, 122929), (71, 123043), (74, 123079), (77, 123109), (83, 123145),

Gene: WaddleDee_172 Start: 118977, Stop: 119588, Start Num: 30
Candidate Starts for WaddleDee_172:
(Start: 23 @118932 has 2 MA's), (Start: 30 @118977 has 2 MA's), (37, 119085), (41, 119160), (44, 119208), (46, 119223), (55, 119337), (58, 119361), (68, 119466), (77, 119556), (78, 119562), (79, 119565), (81, 119583),

Gene: Zooman_238 Start: 144525, Stop: 145274, Start Num: 14
Candidate Starts for Zooman_238:
(Start: 14 @144525 has 2 MA's), (20, 144555), (Start: 24 @144615 has 1 MA's), (Start: 30 @144675 has 2 MA's), (36, 144765), (45, 144900), (50, 144972), (51, 144978), (62, 145086), (63, 145095), (68, 145149), (71, 145176), (72, 145185),