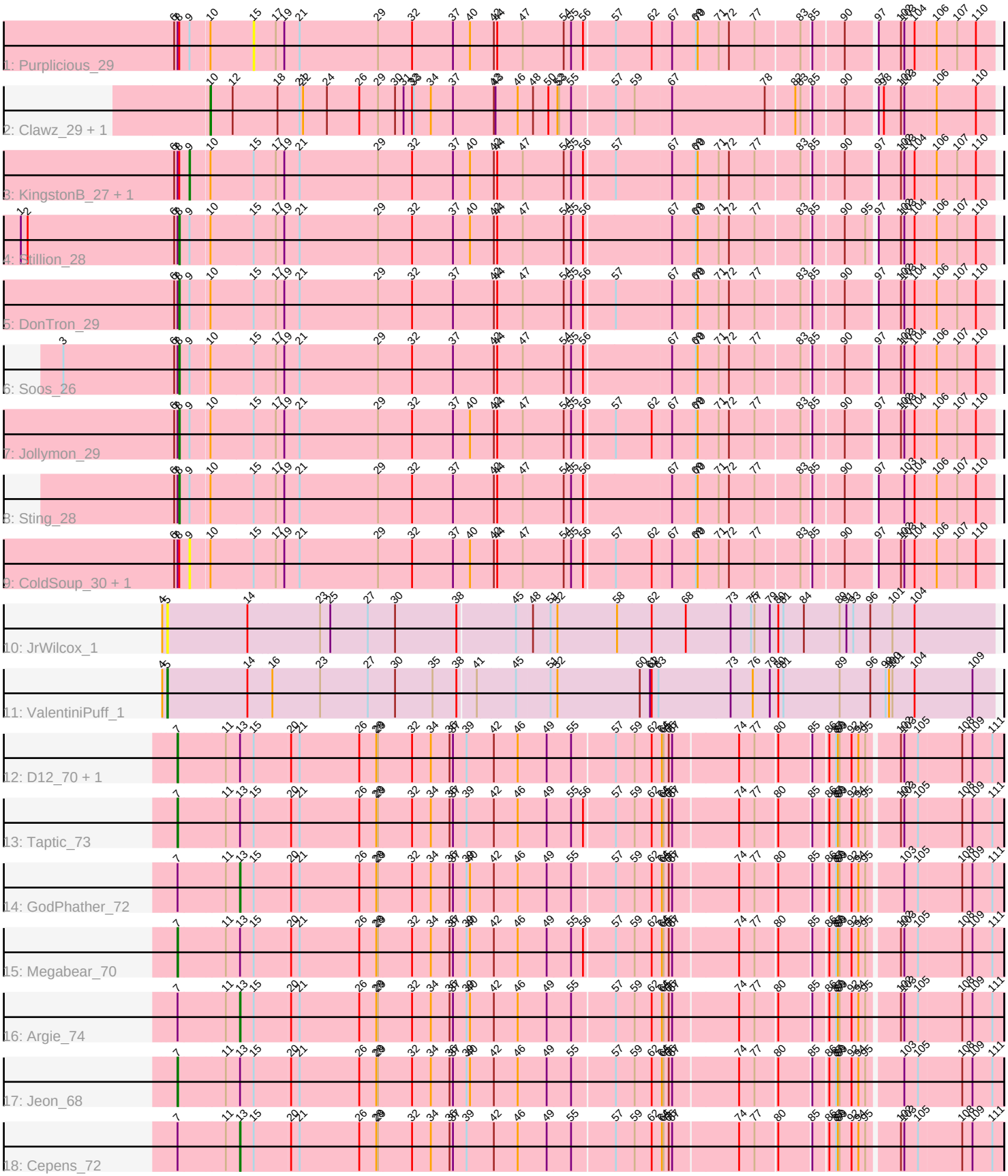
Pham 348029


1: Purplicious_29
2: Clawz_29 + 1
3: KingstonB_27 + 1
4: Stillion_28
5: DonTron_29
6: Soos_26
7: Jollymon_29
8: Sting_28
9: ColdSoup_30 + 1
10: JrWilcox_1
11: ValentiniPuff_1
12: D12_70 + 1
13: Taptic_73
14: GodPhather_72
15: Megabear_70
16: Argie_74
17: Jeon_68
18: Cepens_72

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 348029 Report

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

Pham number 348029 has 22 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Purplicious_29
• Track 2 : Clawz_29, Makar_29
• Track 3 : KingstonB_27, Grumio_29
• Track 4 : Stillion_28
• Track 5 : DonTron_29
• Track 6 : Soos_26
• Track 7 : Jollymon_29
• Track 8 : Sting_28
• Track 9 : ColdSoup_30, Amo99_30
• Track 10 : JrWilcox_1
• Track 11 : ValentiniPuff_1
• Track 12 : D12_70, PR_71
• Track 13 : Taptic_73
• Track 14 : GodPhather_72
• Track 15 : Megabear_70
• Track 16 : Argie_74
• Track 17 : Jeon_68
• Track 18 : Cepens_72

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

The start number called the most often in the published annotations is 7, it was called in 5 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• D12_70, Jeon_68, Megabear_70, PR_71, Taptic_73,

Genes that have the "Most Annotated" start but do not call it:
• Amo99_30, Argie_74, Cepens_72, ColdSoup_30, DonTron_29, GodPhather_72, Grumio_29, Jollymon_29, KingstonB_27, Purplicious_29, Soos_26, Stillion_28, Sting_28,

Genes that do not have the "Most Annotated" start:
• Clawz_29, JrWilcox_1, Makar_29, ValentiniPuff_1,

Summary by start number:

Start 5:
• Found in 2 of 22 (9.1%) of genes in pham
• Manual Annotations of this start: 1 of 16
• Called 100.0% of time when present
• Phage (with cluster) where this start called: JrWilcox_1 (GL), ValentiniPuff_1 (GL),

Start 7:
• Found in 18 of 22 (81.8%) of genes in pham
• Manual Annotations of this start: 5 of 16
• Called 27.8% of time when present
• Phage (with cluster) where this start called: D12_70 (W), Jeon_68 (W), Megabear_70 (W), PR_71 (W), Taptic_73 (W),

Start 8:
• Found in 10 of 22 (45.5%) of genes in pham
• Manual Annotations of this start: 5 of 16
• Called 50.0% of time when present
• Phage (with cluster) where this start called: DonTron_29 (CP), Jollymon_29 (CP), Soos_26 (CP), Stillion_28 (CP), Sting_28 (CP),

Start 9:
• Found in 10 of 22 (45.5%) of genes in pham
• Manual Annotations of this start: 1 of 16
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Amo99_30 (CP), ColdSoup_30 (CP), Grumio_29 (CP), KingstonB_27 (CP),

Start 10:
• Found in 12 of 22 (54.5%) of genes in pham
• Manual Annotations of this start: 1 of 16
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Clawz_29 (CP), Makar_29 (CP),

Start 13:
• Found in 8 of 22 (36.4%) of genes in pham
• Manual Annotations of this start: 3 of 16
• Called 37.5% of time when present
• Phage (with cluster) where this start called: Argie_74 (W), Cepens_72 (W), GodPhather_72 (W),

Start 15:
• Found in 18 of 22 (81.8%) of genes in pham
• No Manual Annotations of this start.
• Called 5.6% of time when present
• Phage (with cluster) where this start called: Purplicious_29 (CP),

Summary by clusters:

There are 3 clusters represented in this pham: GL, CP, W,

Info for manual annotations of cluster CP:
•Start number 8 was manually annotated 5 times for cluster CP.
•Start number 9 was manually annotated 1 time for cluster CP.
•Start number 10 was manually annotated 1 time for cluster CP.

Info for manual annotations of cluster GL:
•Start number 5 was manually annotated 1 time for cluster GL.

Info for manual annotations of cluster W:
•Start number 7 was manually annotated 5 times for cluster W.
•Start number 13 was manually annotated 3 times for cluster W.

Gene Information:

Gene: Amo99_30 Start: 13272, Stop: 14630, Start Num: 9
Candidate Starts for Amo99_30:
(6, 13245), (Start: 7 @13251 has 5 MA's), (Start: 8 @13254 has 5 MA's), (Start: 9 @13272 has 1 MA's), (Start: 10 @13305 has 1 MA's), (15, 13380), (17, 13419), (19, 13434), (21, 13458), (29, 13596), (32, 13653), (37, 13725), (40, 13755), (42, 13797), (44, 13803), (47, 13848), (54, 13920), (55, 13932), (56, 13953), (57, 14004), (62, 14067), (67, 14100), (69, 14142), (70, 14145), (71, 14181), (72, 14199), (77, 14244), (83, 14319), (85, 14334), (90, 14385), (97, 14433), (102, 14472), (103, 14478), (104, 14496), (106, 14532), (107, 14565), (110, 14598),

Gene: Argie_74 Start: 51937, Stop: 53220, Start Num: 13
Candidate Starts for Argie_74:
(Start: 7 @51832 has 5 MA's), (11, 51913), (Start: 13 @51937 has 3 MA's), (15, 51961), (20, 52024), (21, 52039), (26, 52144), (28, 52174), (29, 52177), (32, 52234), (34, 52267), (36, 52300), (37, 52306), (39, 52330), (40, 52336), (42, 52378), (46, 52420), (49, 52471), (55, 52513), (57, 52585), (59, 52618), (62, 52648), (64, 52663), (65, 52666), (66, 52675), (67, 52681), (74, 52792), (77, 52819), (80, 52855), (85, 52909), (86, 52933), (87, 52945), (88, 52948), (89, 52951), (92, 52972), (94, 52984), (95, 52996), (102, 53047), (103, 53053), (105, 53077), (108, 53149), (109, 53167), (111, 53200),

Gene: Cepens_72 Start: 50746, Stop: 52029, Start Num: 13
Candidate Starts for Cepens_72:
(Start: 7 @50641 has 5 MA's), (11, 50722), (Start: 13 @50746 has 3 MA's), (15, 50770), (20, 50833), (21, 50848), (26, 50953), (28, 50983), (29, 50986), (32, 51043), (34, 51076), (36, 51109), (37, 51115), (39, 51139), (42, 51187), (46, 51229), (49, 51280), (55, 51322), (57, 51394), (59, 51427), (62, 51457), (64, 51472), (65, 51475), (66, 51484), (67, 51490), (74, 51601), (77, 51628), (80, 51664), (85, 51718), (86, 51742), (87, 51754), (88, 51757), (89, 51760), (92, 51781), (94, 51793), (95, 51805), (102, 51856), (103, 51862), (105, 51886), (108, 51958), (109, 51976), (111, 52009),

Gene: Clawz_29 Start: 13224, Stop: 14549, Start Num: 10
Candidate Starts for Clawz_29:
(Start: 10 @13224 has 1 MA's), (12, 13263), (18, 13341), (21, 13380), (22, 13386), (24, 13428), (26, 13485), (29, 13518), (30, 13545), (31, 13560), (32, 13575), (33, 13578), (34, 13608), (37, 13647), (42, 13716), (43, 13719), (46, 13758), (48, 13785), (50, 13812), (52, 13827), (53, 13830), (55, 13851), (57, 13923), (59, 13956), (67, 14019), (78, 14181), (82, 14229), (83, 14238), (85, 14253), (90, 14304), (97, 14352), (98, 14361), (102, 14391), (103, 14397), (106, 14451), (110, 14517),

Gene: ColdSoup_30 Start: 13272, Stop: 14630, Start Num: 9
Candidate Starts for ColdSoup_30:

(6, 13245), (Start: 7 @13251 has 5 MA's), (Start: 8 @13254 has 5 MA's), (Start: 9 @13272 has 1 MA's), (Start: 10 @13305 has 1 MA's), (15, 13380), (17, 13419), (19, 13434), (21, 13458), (29, 13596), (32, 13653), (37, 13725), (40, 13755), (42, 13797), (44, 13803), (47, 13848), (54, 13920), (55, 13932), (56, 13953), (57, 14004), (62, 14067), (67, 14100), (69, 14142), (70, 14145), (71, 14181), (72, 14199), (77, 14244), (83, 14319), (85, 14334), (90, 14385), (97, 14433), (102, 14472), (103, 14478), (104, 14496), (106, 14532), (107, 14565), (110, 14598),

Gene: D12_70 Start: 51276, Stop: 52664, Start Num: 7
Candidate Starts for D12_70:
(Start: 7 @51276 has 5 MA's), (11, 51357), (Start: 13 @51381 has 3 MA's), (15, 51405), (20, 51468), (21, 51483), (26, 51588), (28, 51618), (29, 51621), (32, 51678), (34, 51711), (36, 51744), (37, 51750), (39, 51774), (42, 51822), (46, 51864), (49, 51915), (55, 51957), (57, 52029), (59, 52062), (62, 52092), (64, 52107), (65, 52110), (66, 52119), (67, 52125), (74, 52236), (77, 52263), (80, 52299), (85, 52353), (86, 52377), (87, 52389), (88, 52392), (89, 52395), (92, 52416), (94, 52428), (95, 52440), (102, 52491), (103, 52497), (105, 52521), (108, 52593), (109, 52611), (111, 52644),

Gene: DonTron_29 Start: 13324, Stop: 14700, Start Num: 8
Candidate Starts for DonTron_29:
(6, 13315), (Start: 7 @13321 has 5 MA's), (Start: 8 @13324 has 5 MA's), (Start: 9 @13342 has 1 MA's), (Start: 10 @13375 has 1 MA's), (15, 13450), (17, 13489), (19, 13504), (21, 13528), (29, 13666), (32, 13723), (37, 13795), (42, 13867), (44, 13873), (47, 13918), (54, 13990), (55, 14002), (56, 14023), (57, 14074), (67, 14170), (69, 14212), (70, 14215), (71, 14251), (72, 14269), (77, 14314), (83, 14389), (85, 14404), (90, 14455), (97, 14503), (102, 14542), (103, 14548), (104, 14566), (106, 14602), (107, 14635), (110, 14668),

Gene: GodPhather_72 Start: 51391, Stop: 52674, Start Num: 13
Candidate Starts for GodPhather_72:
(Start: 7 @51286 has 5 MA's), (11, 51367), (Start: 13 @51391 has 3 MA's), (15, 51415), (20, 51478), (21, 51493), (26, 51598), (28, 51628), (29, 51631), (32, 51688), (34, 51721), (36, 51754), (37, 51760), (39, 51784), (40, 51790), (42, 51832), (46, 51874), (49, 51925), (55, 51967), (57, 52039), (59, 52072), (62, 52102), (64, 52117), (65, 52120), (66, 52129), (67, 52135), (74, 52246), (77, 52273), (80, 52309), (85, 52363), (86, 52387), (87, 52399), (88, 52402), (89, 52405), (92, 52426), (94, 52438), (95, 52450), (103, 52507), (105, 52531), (108, 52603), (109, 52621), (111, 52654),

Gene: Grumio_29 Start: 12780, Stop: 14138, Start Num: 9
Candidate Starts for Grumio_29:
(6, 12753), (Start: 7 @12759 has 5 MA's), (Start: 8 @12762 has 5 MA's), (Start: 9 @12780 has 1 MA's), (Start: 10 @12813 has 1 MA's), (15, 12888), (17, 12927), (19, 12942), (21, 12966), (29, 13104), (32, 13161), (37, 13233), (40, 13263), (42, 13305), (44, 13311), (47, 13356), (54, 13428), (55, 13440), (56, 13461), (57, 13512), (67, 13608), (69, 13650), (70, 13653), (71, 13689), (72, 13707), (77, 13752), (83, 13827), (85, 13842), (90, 13893), (97, 13941), (102, 13980), (103, 13986), (104, 14004), (106, 14040), (107, 14073), (110, 14106),

Gene: Jeon_68 Start: 50779, Stop: 52167, Start Num: 7
Candidate Starts for Jeon_68:
(Start: 7 @50779 has 5 MA's), (11, 50860), (Start: 13 @50884 has 3 MA's), (15, 50908), (20, 50971), (21, 50986), (26, 51091), (28, 51121), (29, 51124), (32, 51181), (34, 51214), (36, 51247), (37, 51253), (39, 51277), (40, 51283), (42, 51325), (46, 51367), (49, 51418), (55, 51460), (57, 51532), (59, 51565), (62, 51595), (64, 51610), (65, 51613), (66, 51622), (67, 51628), (74, 51739), (77, 51766), (80, 51802), (85, 51856), (86, 51880), (87, 51892), (88, 51895), (89, 51898), (92, 51919), (94, 51931), (95, 51943), (103, 52000), (105, 52024), (108, 52096), (109, 52114), (111, 52147),

Gene: Jollymon_29 Start: 13254, Stop: 14630, Start Num: 8

Candidate Starts for Jollymon_29:
(6, 13245), (Start: 7 @13251 has 5 MA's), (Start: 8 @13254 has 5 MA's), (Start: 9 @13272 has 1 MA's), (Start: 10 @13305 has 1 MA's), (15, 13380), (17, 13419), (19, 13434), (21, 13458), (29, 13596), (32, 13653), (37, 13725), (40, 13755), (42, 13797), (44, 13803), (47, 13848), (54, 13920), (55, 13932), (56, 13953), (57, 14004), (62, 14067), (67, 14100), (69, 14142), (70, 14145), (71, 14181), (72, 14199), (77, 14244), (83, 14319), (85, 14334), (90, 14385), (97, 14433), (102, 14472), (103, 14478), (104, 14496), (106, 14532), (107, 14565), (110, 14598),

Gene: JrWilcox_1 Start: 10, Stop: 1446, Start Num: 5
Candidate Starts for JrWilcox_1:
(4, 1), (Start: 5 @10 has 1 MA's), (14, 151), (23, 277), (25, 295), (27, 361), (30, 409), (38, 517), (45, 613), (48, 640), (51, 670), (52, 682), (58, 787), (62, 847), (68, 907), (73, 982), (75, 1018), (77, 1024), (79, 1051), (80, 1066), (81, 1075), (84, 1111), (89, 1174), (91, 1186), (93, 1198), (96, 1228), (101, 1267), (104, 1306),

Gene: KingstonB_27 Start: 12780, Stop: 14138, Start Num: 9
Candidate Starts for KingstonB_27:
(6, 12753), (Start: 7 @12759 has 5 MA's), (Start: 8 @12762 has 5 MA's), (Start: 9 @12780 has 1 MA's), (Start: 10 @12813 has 1 MA's), (15, 12888), (17, 12927), (19, 12942), (21, 12966), (29, 13104), (32, 13161), (37, 13233), (40, 13263), (42, 13305), (44, 13311), (47, 13356), (54, 13428), (55, 13440), (56, 13461), (57, 13512), (67, 13608), (69, 13650), (70, 13653), (71, 13689), (72, 13707), (77, 13752), (83, 13827), (85, 13842), (90, 13893), (97, 13941), (102, 13980), (103, 13986), (104, 14004), (106, 14040), (107, 14073), (110, 14106),

Gene: Makar_29 Start: 13296, Stop: 14621, Start Num: 10
Candidate Starts for Makar_29:
(Start: 10 @13296 has 1 MA's), (12, 13335), (18, 13413), (21, 13452), (22, 13458), (24, 13500), (26, 13557), (29, 13590), (30, 13617), (31, 13632), (32, 13647), (33, 13650), (34, 13680), (37, 13719), (42, 13788), (43, 13791), (46, 13830), (48, 13857), (50, 13884), (52, 13899), (53, 13902), (55, 13923), (57, 13995), (59, 14028), (67, 14091), (78, 14253), (82, 14301), (83, 14310), (85, 14325), (90, 14376), (97, 14424), (98, 14433), (102, 14463), (103, 14469), (106, 14523), (110, 14589),

Gene: Megabear_70 Start: 50562, Stop: 51950, Start Num: 7
Candidate Starts for Megabear_70:
(Start: 7 @50562 has 5 MA's), (11, 50643), (Start: 13 @50667 has 3 MA's), (15, 50691), (20, 50754), (21, 50769), (26, 50874), (28, 50904), (29, 50907), (32, 50964), (34, 50997), (36, 51030), (37, 51036), (39, 51060), (40, 51066), (42, 51108), (46, 51150), (49, 51201), (55, 51243), (56, 51264), (57, 51315), (59, 51348), (62, 51378), (64, 51393), (65, 51396), (66, 51405), (67, 51411), (74, 51522), (77, 51549), (80, 51585), (85, 51639), (86, 51663), (87, 51675), (88, 51678), (89, 51681), (92, 51702), (94, 51714), (95, 51726), (102, 51777), (103, 51783), (105, 51807), (108, 51879), (109, 51897), (111, 51930),

Gene: PR_71 Start: 51253, Stop: 52641, Start Num: 7
Candidate Starts for PR_71:
(Start: 7 @51253 has 5 MA's), (11, 51334), (Start: 13 @51358 has 3 MA's), (15, 51382), (20, 51445), (21, 51460), (26, 51565), (28, 51595), (29, 51598), (32, 51655), (34, 51688), (36, 51721), (37, 51727), (39, 51751), (42, 51799), (46, 51841), (49, 51892), (55, 51934), (57, 52006), (59, 52039), (62, 52069), (64, 52084), (65, 52087), (66, 52096), (67, 52102), (74, 52213), (77, 52240), (80, 52276), (85, 52330), (86, 52354), (87, 52366), (88, 52369), (89, 52372), (92, 52393), (94, 52405), (95, 52417), (102, 52468), (103, 52474), (105, 52498), (108, 52570), (109, 52588), (111, 52621),

Gene: Purplicious_29 Start: 12892, Stop: 14142, Start Num: 15
Candidate Starts for Purplicious_29:

(6, 12757), (Start: 7 @12763 has 5 MA's), (Start: 8 @12766 has 5 MA's), (Start: 9 @12784 has 1 MA's), (Start: 10 @12817 has 1 MA's), (15, 12892), (17, 12931), (19, 12946), (21, 12970), (29, 13108), (32, 13165), (37, 13237), (40, 13267), (42, 13309), (44, 13315), (47, 13360), (54, 13432), (55, 13444), (56, 13465), (57, 13516), (62, 13579), (67, 13612), (69, 13654), (70, 13657), (71, 13693), (72, 13711), (77, 13756), (83, 13831), (85, 13846), (90, 13897), (97, 13945), (102, 13984), (103, 13990), (104, 14008), (106, 14044), (107, 14077), (110, 14110),

Gene: Soos_26 Start: 12596, Stop: 13972, Start Num: 8
Candidate Starts for Soos_26:
(3, 12392), (6, 12587), (Start: 7 @12593 has 5 MA's), (Start: 8 @12596 has 5 MA's), (Start: 9 @12614 has 1 MA's), (Start: 10 @12647 has 1 MA's), (15, 12722), (17, 12761), (19, 12776), (21, 12800), (29, 12938), (32, 12995), (37, 13067), (42, 13139), (44, 13145), (47, 13190), (54, 13262), (55, 13274), (56, 13295), (67, 13442), (69, 13484), (70, 13487), (71, 13523), (72, 13541), (77, 13586), (83, 13661), (85, 13676), (90, 13727), (97, 13775), (102, 13814), (103, 13820), (104, 13838), (106, 13874), (107, 13907), (110, 13940),

Gene: Stillion_28 Start: 13076, Stop: 14452, Start Num: 8
Candidate Starts for Stillion_28:
(1, 12797), (2, 12809), (6, 13067), (Start: 7 @13073 has 5 MA's), (Start: 8 @13076 has 5 MA's), (Start: 9 @13094 has 1 MA's), (Start: 10 @13127 has 1 MA's), (15, 13202), (17, 13241), (19, 13256), (21, 13280), (29, 13418), (32, 13475), (37, 13547), (40, 13577), (42, 13619), (44, 13625), (47, 13670), (54, 13742), (55, 13754), (56, 13775), (67, 13922), (69, 13964), (70, 13967), (71, 14003), (72, 14021), (77, 14066), (83, 14141), (85, 14156), (90, 14207), (95, 14243), (97, 14255), (102, 14294), (103, 14300), (104, 14318), (106, 14354), (107, 14387), (110, 14420),

Gene: Sting_28 Start: 12930, Stop: 14306, Start Num: 8
Candidate Starts for Sting_28:
(6, 12921), (Start: 7 @12927 has 5 MA's), (Start: 8 @12930 has 5 MA's), (Start: 9 @12948 has 1 MA's), (Start: 10 @12981 has 1 MA's), (15, 13056), (17, 13095), (19, 13110), (21, 13134), (29, 13272), (32, 13329), (37, 13401), (42, 13473), (44, 13479), (47, 13524), (54, 13596), (55, 13608), (56, 13629), (67, 13776), (69, 13818), (70, 13821), (71, 13857), (72, 13875), (77, 13920), (83, 13995), (85, 14010), (90, 14061), (97, 14109), (103, 14154), (104, 14172), (106, 14208), (107, 14241), (110, 14274),

Gene: Taptic_73 Start: 51258, Stop: 52646, Start Num: 7
Candidate Starts for Taptic_73:
(Start: 7 @51258 has 5 MA's), (11, 51339), (Start: 13 @51363 has 3 MA's), (15, 51387), (20, 51450), (21, 51465), (26, 51570), (28, 51600), (29, 51603), (32, 51660), (34, 51693), (36, 51726), (37, 51732), (39, 51756), (42, 51804), (46, 51846), (49, 51897), (55, 51939), (56, 51960), (57, 52011), (59, 52044), (62, 52074), (64, 52089), (65, 52092), (66, 52101), (67, 52107), (74, 52218), (77, 52245), (80, 52281), (85, 52335), (86, 52359), (87, 52371), (88, 52374), (89, 52377), (92, 52398), (94, 52410), (95, 52422), (102, 52473), (103, 52479), (105, 52503), (108, 52575), (109, 52593), (111, 52626),

Gene: ValentiniPuff_1 Start: 10, Stop: 1446, Start Num: 5
Candidate Starts for ValentiniPuff_1:
(4, 1), (Start: 5 @10 has 1 MA's), (14, 151), (16, 193), (23, 277), (27, 361), (30, 409), (35, 475), (38, 517), (41, 547), (45, 613), (51, 670), (52, 682), (60, 826), (61, 844), (62, 847), (63, 859), (73, 982), (76, 1021), (79, 1051), (80, 1066), (81, 1075), (89, 1174), (96, 1228), (99, 1255), (100, 1261), (101, 1267), (104, 1306), (109, 1408),