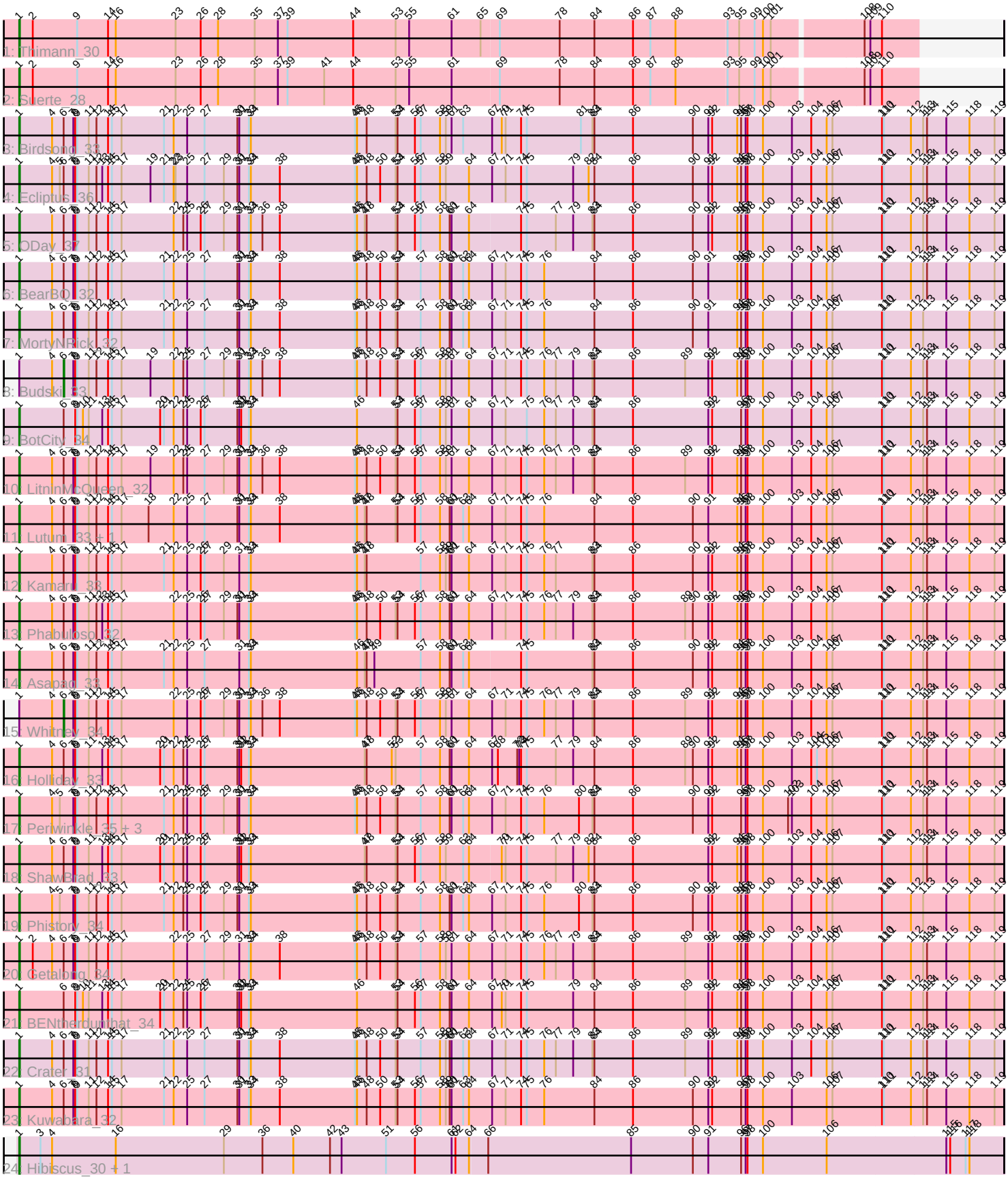
Pham 344275


1: Thimann_30
2: Suerte_28
3: Birdsong_33
4: Ecliptus_36
5: ODay_37
6: BearBQ_32
7: MortyNRick_32
8: Budski_33
9: BotCity_34
10: LitninMcQueen_32
11: Lutuni_33 + 1
12: Kamari_38
13: Phabulosa_32
14: Asapad_33
15: Whitney_34
16: Holliday_33
17: Periwinkle_35 + 3
18: ShawBrad_33
19: Phistory_34
20: Getaburg_34
21: BENtherdumbat_34
22: Crater_31
23: Kuwabara_32
24: Hibiscus_30 + 1

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 344275 Report

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

Pham number 344275 has 29 members, 0 are drafts.

Phages represented in each track:
- Track 1 : Thimann_30
- Track 2 : Suerte_28
- Track 3 : Birdsong_33
- Track 4 : Ecliptus_36
- Track 5 : ODay_37
- Track 6 : BearBQ_32
- Track 7 : MortyNRick_32
- Track 8 : Budski_33
- Track 9 : BotCity_34
- Track 10 : LitninMcQueen_32
- Track 11 : Lutum_33, Kenna_32
- Track 12 : Kamaru_33
- Track 13 : Phabuloso_32
- Track 14 : Asapag_33
- Track 15 : Whitney_34
- Track 16 : Holliday_33
- Track 17 : Periwinkle_35, Leroy_33, Apricot_32, Horus_33
- Track 18 : ShawBrad_33
- Track 19 : Phistory_34
- Track 20 : Getalong_34
- Track 21 : BENtherdunthat_34
- Track 22 : Crater_31
- Track 23 : Kuwabara_32
- Track 24 : Hibiscus_30, Heinz_30

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

The start number called the most often in the published annotations is 1, it was called in 27 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Apricot_32, Asapag_33, BENtherdunthat_34, BearBQ_32, Birdsong_33, BotCity_34, Crater_31, Ecliptus_36, Getalong_34, Heinz_30, Hibiscus_30, Holliday_33, Horus_33, Kamaru_33, Kenna_32, Kuwabara_32, Leroy_33, LitninMcQueen_32,

Lutum_33, MortyNRick_32, ODay_37, Periwinkle_35, Phabuloso_32, Phistory_34, ShawBrad_33, Suerte_28, Thimann_30,

Genes that have the "Most Annotated" start but do not call it:
• Budski_33, Whitney_34,

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

Summary by start number:

Start 1:
• Found in 29 of 29 (100.0%) of genes in pham
• Manual Annotations of this start: 27 of 29
• Called 93.1% of time when present
• Phage (with cluster) where this start called: Apricot_32 (DN3), Asapag_33 (DN1), BENtherdunthat_34 (DN1), BearBQ_32 (DN), Birdsong_33 (DN), BotCity_34 (DN), Crater_31 (DN3), Ecliptus_36 (DN), Getalong_34 (DN1), Heinz_30 (DY), Hibiscus_30 (DY), Holliday_33 (DN1), Horus_33 (DN1), Kamaru_33 (DN1), Kenna_32 (DN1), Kuwabara_32 (DN4), Leroy_33 (DN1), LitninMcQueen_32 (DN1), Lutum_33 (DN1), MortyNRick_32 (DN), ODay_37 (DN), Periwinkle_35 (DN1), Phabuloso_32 (DN1), Phistory_34 (DN1), ShawBrad_33 (DN1), Suerte_28 (CZ4), Thimann_30 (CZ4),

Start 6:
• Found in 20 of 29 (69.0%) of genes in pham
• Manual Annotations of this start: 2 of 29
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Budski_33 (DN), Whitney_34 (DN1),

Summary by clusters:

There are 6 clusters represented in this pham: DN, CZ4, DN4, DN1, DN3, DY,

Info for manual annotations of cluster CZ4:
•Start number 1 was manually annotated 2 times for cluster CZ4.

Info for manual annotations of cluster DN:
•Start number 1 was manually annotated 6 times for cluster DN.
•Start number 6 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 1 was manually annotated 14 times for cluster DN1.
•Start number 6 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN3:
•Start number 1 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:
•Start number 1 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DY:
•Start number 1 was manually annotated 2 times for cluster DY.

Gene Information:

Gene: Apricot_32 Start: 24360, Stop: 25883, Start Num: 1
Candidate Starts for Apricot_32:
(Start: 1 @24360 has 27 MA's), (4, 24411), (5, 24423), (7, 24444), (8, 24447), (9, 24450), (11, 24468), (12, 24480), (14, 24498), (15, 24504), (17, 24519), (21, 24585), (22, 24600), (24, 24615), (25, 24621), (26, 24642), (27, 24648), (29, 24678), (30, 24699), (31, 24702), (33, 24717), (34, 24720), (45, 24882), (46, 24885), (48, 24900), (50, 24921), (53, 24945), (54, 24948), (57, 24984), (58, 25014), (60, 25029), (61, 25032), (63, 25050), (64, 25059), (67, 25092), (71, 25113), (74, 25137), (75, 25146), (76, 25173), (80, 25227), (83, 25248), (84, 25251), (86, 25311), (90, 25404), (91, 25428), (92, 25434), (96, 25479), (97, 25485), (98, 25488), (100, 25512), (102, 25551), (103, 25557), (104, 25587), (106, 25611), (107, 25620), (110, 25695), (111, 25698), (112, 25740), (113, 25758), (114, 25764), (115, 25794), (118, 25830), (119, 25869),

Gene: Asapag_33 Start: 24801, Stop: 26324, Start Num: 1
Candidate Starts for Asapag_33:
(Start: 1 @24801 has 27 MA's), (4, 24852), (Start: 6 @24870 has 2 MA's), (7, 24885), (8, 24888), (9, 24891), (11, 24909), (12, 24921), (14, 24939), (15, 24945), (17, 24960), (21, 25026), (22, 25041), (25, 25062), (27, 25089), (31, 25143), (33, 25158), (34, 25161), (46, 25326), (47, 25338), (48, 25341), (49, 25353), (57, 25425), (58, 25455), (60, 25470), (61, 25473), (63, 25491), (64, 25500), (74, 25578), (75, 25587), (83, 25689), (84, 25692), (86, 25752), (90, 25845), (91, 25869), (92, 25875), (94, 25914), (96, 25920), (97, 25926), (98, 25929), (100, 25953), (103, 25998), (104, 26028), (106, 26052), (107, 26061), (110, 26136), (111, 26139), (112, 26181), (113, 26199), (114, 26205), (115, 26235), (118, 26271), (119, 26310),

Gene: BENtherdunthat_34 Start: 24366, Stop: 25889, Start Num: 1
Candidate Starts for BENtherdunthat_34:
(Start: 1 @24366 has 27 MA's), (Start: 6 @24435 has 2 MA's), (8, 24453), (9, 24456), (10, 24465), (11, 24474), (13, 24495), (14, 24504), (15, 24510), (17, 24525), (20, 24585), (21, 24591), (22, 24606), (24, 24621), (25, 24627), (26, 24648), (27, 24654), (30, 24705), (31, 24708), (32, 24711), (33, 24723), (34, 24726), (46, 24891), (53, 24951), (54, 24954), (56, 24981), (57, 24990), (58, 25020), (60, 25035), (61, 25038), (64, 25065), (67, 25098), (70, 25113), (71, 25119), (74, 25143), (75, 25152), (79, 25224), (84, 25257), (86, 25317), (89, 25398), (91, 25434), (92, 25440), (94, 25479), (96, 25485), (97, 25491), (98, 25494), (100, 25518), (103, 25563), (104, 25593), (106, 25617), (107, 25626), (110, 25701), (111, 25704), (112, 25746), (113, 25764), (114, 25770), (115, 25800), (118, 25836), (119, 25875),

Gene: BearBQ_32 Start: 25587, Stop: 27110, Start Num: 1
Candidate Starts for BearBQ_32:
(Start: 1 @25587 has 27 MA's), (4, 25638), (Start: 6 @25656 has 2 MA's), (7, 25671), (8, 25674), (9, 25677), (11, 25695), (12, 25707), (14, 25725), (15, 25731), (17, 25746), (21, 25812), (22, 25827), (25, 25848), (27, 25875), (30, 25926), (31, 25929), (33, 25944), (34, 25947), (38, 25992), (45, 26109), (46, 26112), (48, 26127), (50, 26148), (53, 26172), (54, 26175), (57, 26211), (58, 26241), (60, 26256), (61, 26259), (63, 26277), (64, 26286), (67, 26319), (71, 26340), (74, 26364), (75, 26373), (76, 26400), (84, 26478), (86, 26538), (90, 26631), (91, 26655), (94, 26700), (96, 26706), (97, 26712), (98, 26715), (100, 26739), (103, 26784), (104, 26814), (106, 26838), (107, 26847), (110, 26922), (111, 26925), (112, 26967), (113, 26985), (114, 26991), (115, 27021), (118, 27057), (119, 27096),

Gene: Birdsong_33 Start: 24480, Stop: 26003, Start Num: 1
Candidate Starts for Birdsong_33:
(Start: 1 @24480 has 27 MA's), (4, 24531), (Start: 6 @24549 has 2 MA's), (7, 24564), (8, 24567), (9, 24570), (11, 24588), (12, 24600), (14, 24618), (15, 24624), (17, 24639), (21, 24705), (22, 24720), (25,

24741), (27, 24768), (30, 24819), (31, 24822), (33, 24837), (34, 24840), (45, 25002), (46, 25005), (48, 25020), (53, 25065), (54, 25068), (56, 25095), (57, 25104), (58, 25134), (59, 25143), (61, 25152), (63, 25170), (67, 25212), (70, 25227), (71, 25233), (74, 25257), (75, 25266), (81, 25350), (83, 25368), (84, 25371), (86, 25431), (90, 25524), (91, 25548), (92, 25554), (94, 25593), (96, 25599), (97, 25605), (98, 25608), (100, 25632), (103, 25677), (104, 25707), (106, 25731), (107, 25740), (110, 25815), (111, 25818), (112, 25860), (113, 25878), (114, 25884), (115, 25914), (118, 25950), (119, 25989),

Gene: BotCity_34 Start: 24367, Stop: 25890, Start Num: 1
Candidate Starts for BotCity_34:
(Start: 1 @24367 has 27 MA's), (Start: 6 @24436 has 2 MA's), (8, 24454), (9, 24457), (10, 24466), (11, 24475), (13, 24496), (14, 24505), (15, 24511), (17, 24526), (20, 24586), (21, 24592), (22, 24607), (24, 24622), (25, 24628), (26, 24649), (27, 24655), (30, 24706), (31, 24709), (32, 24712), (33, 24724), (34, 24727), (46, 24892), (53, 24952), (54, 24955), (56, 24982), (57, 24991), (58, 25021), (59, 25030), (61, 25039), (64, 25066), (67, 25099), (71, 25120), (75, 25153), (76, 25180), (77, 25198), (79, 25225), (83, 25255), (84, 25258), (86, 25318), (91, 25435), (92, 25441), (96, 25486), (97, 25492), (98, 25495), (100, 25519), (103, 25564), (104, 25594), (106, 25618), (107, 25627), (110, 25702), (111, 25705), (112, 25747), (113, 25765), (114, 25771), (115, 25801), (118, 25837), (119, 25876),

Gene: Budski_33 Start: 24951, Stop: 26405, Start Num: 6
Candidate Starts for Budski_33:
(Start: 1 @24882 has 27 MA's), (4, 24933), (Start: 6 @24951 has 2 MA's), (7, 24966), (8, 24969), (9, 24972), (11, 24990), (12, 25002), (14, 25020), (15, 25026), (17, 25041), (19, 25086), (22, 25122), (24, 25137), (25, 25143), (27, 25170), (29, 25200), (30, 25221), (31, 25224), (33, 25239), (34, 25242), (36, 25260), (38, 25287), (45, 25404), (46, 25407), (48, 25422), (50, 25443), (53, 25467), (54, 25470), (56, 25497), (57, 25506), (58, 25536), (59, 25545), (61, 25554), (64, 25581), (67, 25614), (71, 25635), (74, 25659), (75, 25668), (76, 25695), (77, 25713), (79, 25740), (83, 25770), (84, 25773), (86, 25833), (89, 25914), (91, 25950), (92, 25956), (94, 25995), (96, 26001), (97, 26007), (98, 26010), (100, 26034), (103, 26079), (104, 26109), (106, 26133), (107, 26142), (110, 26217), (111, 26220), (112, 26262), (113, 26280), (114, 26286), (115, 26316), (118, 26352), (119, 26391),

Gene: Crater_31 Start: 24335, Stop: 25858, Start Num: 1
Candidate Starts for Crater_31:
(Start: 1 @24335 has 27 MA's), (4, 24386), (Start: 6 @24404 has 2 MA's), (7, 24419), (8, 24422), (9, 24425), (11, 24443), (12, 24455), (14, 24473), (15, 24479), (17, 24494), (21, 24560), (22, 24575), (25, 24596), (27, 24623), (30, 24674), (31, 24677), (33, 24692), (34, 24695), (38, 24740), (45, 24857), (46, 24860), (48, 24875), (50, 24896), (53, 24920), (54, 24923), (57, 24959), (58, 24989), (59, 24998), (60, 25004), (61, 25007), (63, 25025), (64, 25034), (67, 25067), (71, 25088), (74, 25112), (75, 25121), (76, 25148), (77, 25166), (79, 25193), (83, 25223), (84, 25226), (86, 25286), (89, 25367), (91, 25403), (92, 25409), (94, 25448), (96, 25454), (97, 25460), (98, 25463), (100, 25487), (103, 25532), (104, 25562), (106, 25586), (107, 25595), (110, 25670), (111, 25673), (112, 25715), (113, 25733), (114, 25739), (115, 25769), (118, 25805), (119, 25844),

Gene: Ecliptus_36 Start: 26322, Stop: 27845, Start Num: 1
Candidate Starts for Ecliptus_36:
(Start: 1 @26322 has 27 MA's), (4, 26373), (5, 26385), (Start: 6 @26391 has 2 MA's), (7, 26406), (8, 26409), (9, 26412), (11, 26430), (12, 26442), (13, 26451), (14, 26460), (15, 26466), (17, 26481), (19, 26526), (21, 26547), (22, 26562), (23, 26565), (25, 26583), (27, 26610), (29, 26640), (30, 26661), (31, 26664), (33, 26679), (34, 26682), (38, 26727), (45, 26844), (46, 26847), (48, 26862), (50, 26883), (53, 26907), (54, 26910), (56, 26937), (57, 26946), (58, 26976), (59, 26985), (64, 27021), (67, 27054), (71, 27075), (74, 27099), (75, 27108), (79, 27180), (82, 27204), (84, 27213), (86, 27273), (90, 27366), (91, 27390), (92, 27396), (94, 27435), (96, 27441), (97, 27447), (98, 27450), (100, 27474), (103, 27519), (104, 27549), (106, 27573), (107, 27582), (110, 27657), (111, 27660), (112, 27702), (113, 27720), (114, 27726), (115, 27756), (118, 27792), (119, 27831),

Gene: Getalong_34 Start: 25578, Stop: 27101, Start Num: 1
Candidate Starts for Getalong_34:
(Start: 1 @25578 has 27 MA's), (2, 25599), (4, 25629), (Start: 6 @25647 has 2 MA's), (7, 25662), (8, 25665), (9, 25668), (11, 25686), (12, 25698), (14, 25716), (15, 25722), (17, 25737), (22, 25818), (25, 25839), (27, 25866), (29, 25896), (31, 25920), (33, 25935), (34, 25938), (38, 25983), (45, 26100), (46, 26103), (48, 26118), (50, 26139), (53, 26163), (54, 26166), (57, 26202), (58, 26232), (59, 26241), (61, 26250), (64, 26277), (67, 26310), (71, 26331), (74, 26355), (75, 26364), (76, 26391), (77, 26409), (79, 26436), (83, 26466), (84, 26469), (86, 26529), (89, 26610), (91, 26646), (92, 26652), (94, 26691), (96, 26697), (97, 26703), (98, 26706), (100, 26730), (103, 26775), (104, 26805), (106, 26829), (107, 26838), (110, 26913), (111, 26916), (112, 26958), (113, 26976), (114, 26982), (115, 27012), (118, 27048), (119, 27087),

Gene: Heinz_30 Start: 22113, Stop: 23636, Start Num: 1
Candidate Starts for Heinz_30:
(Start: 1 @22113 has 27 MA's), (3, 22146), (4, 22164), (16, 22263), (29, 22431), (36, 22491), (40, 22539), (42, 22596), (43, 22614), (51, 22683), (56, 22728), (61, 22785), (62, 22791), (64, 22812), (66, 22839), (85, 23061), (90, 23157), (91, 23181), (96, 23232), (97, 23238), (98, 23241), (100, 23265), (106, 23364), (115, 23547), (116, 23553), (117, 23577), (118, 23583),

Gene: Hibiscus_30 Start: 22062, Stop: 23585, Start Num: 1
Candidate Starts for Hibiscus_30:
(Start: 1 @22062 has 27 MA's), (3, 22095), (4, 22113), (16, 22212), (29, 22380), (36, 22440), (40, 22488), (42, 22545), (43, 22563), (51, 22632), (56, 22677), (61, 22734), (62, 22740), (64, 22761), (66, 22788), (85, 23010), (90, 23106), (91, 23130), (96, 23181), (97, 23187), (98, 23190), (100, 23214), (106, 23313), (115, 23496), (116, 23502), (117, 23526), (118, 23532),

Gene: Holliday_33 Start: 24898, Stop: 26421, Start Num: 1
Candidate Starts for Holliday_33:
(Start: 1 @24898 has 27 MA's), (4, 24949), (Start: 6 @24967 has 2 MA's), (7, 24982), (8, 24985), (9, 24988), (11, 25006), (13, 25027), (14, 25036), (15, 25042), (17, 25057), (20, 25117), (21, 25123), (22, 25138), (24, 25153), (25, 25159), (26, 25180), (27, 25186), (30, 25237), (31, 25240), (32, 25243), (33, 25255), (34, 25258), (47, 25435), (48, 25438), (52, 25477), (53, 25483), (57, 25522), (58, 25552), (60, 25567), (61, 25570), (64, 25597), (67, 25630), (68, 25639), (72, 25669), (73, 25672), (74, 25675), (75, 25684), (77, 25729), (79, 25756), (84, 25789), (86, 25849), (89, 25930), (90, 25942), (91, 25966), (92, 25972), (94, 26011), (96, 26017), (97, 26023), (98, 26026), (100, 26050), (103, 26095), (104, 26125), (105, 26134), (106, 26149), (107, 26158), (110, 26233), (111, 26236), (112, 26278), (113, 26296), (114, 26302), (115, 26332), (118, 26368), (119, 26407),

Gene: Horus_33 Start: 24823, Stop: 26346, Start Num: 1
Candidate Starts for Horus_33:
(Start: 1 @24823 has 27 MA's), (4, 24874), (5, 24886), (7, 24907), (8, 24910), (9, 24913), (11, 24931), (12, 24943), (14, 24961), (15, 24967), (17, 24982), (21, 25048), (22, 25063), (24, 25078), (25, 25084), (26, 25105), (27, 25111), (29, 25141), (30, 25162), (31, 25165), (33, 25180), (34, 25183), (45, 25345), (46, 25348), (48, 25363), (50, 25384), (53, 25408), (54, 25411), (57, 25447), (58, 25477), (60, 25492), (61, 25495), (63, 25513), (64, 25522), (67, 25555), (71, 25576), (74, 25600), (75, 25609), (76, 25636), (80, 25690), (83, 25711), (84, 25714), (86, 25774), (90, 25867), (91, 25891), (92, 25897), (96, 25942), (97, 25948), (98, 25951), (100, 25975), (102, 26014), (103, 26020), (104, 26050), (106, 26074), (107, 26083), (110, 26158), (111, 26161), (112, 26203), (113, 26221), (114, 26227), (115, 26257), (118, 26293), (119, 26332),

Gene: Kamaru_33 Start: 24898, Stop: 26421, Start Num: 1
Candidate Starts for Kamaru_33:

(Start: 1 @24898 has 27 MA's), (4, 24949), (Start: 6 @24967 has 2 MA's), (7, 24982), (8, 24985), (9, 24988), (11, 25006), (12, 25018), (14, 25036), (15, 25042), (17, 25057), (21, 25123), (22, 25138), (25, 25159), (26, 25180), (27, 25186), (29, 25216), (31, 25240), (33, 25255), (34, 25258), (45, 25420), (46, 25423), (47, 25435), (48, 25438), (57, 25522), (58, 25552), (59, 25561), (60, 25567), (61, 25570), (64, 25597), (67, 25630), (71, 25651), (74, 25675), (75, 25684), (76, 25711), (77, 25729), (83, 25786), (84, 25789), (86, 25849), (90, 25942), (91, 25966), (92, 25972), (94, 26011), (96, 26017), (97, 26023), (98, 26026), (100, 26050), (103, 26095), (104, 26125), (106, 26149), (107, 26158), (110, 26233), (111, 26236), (112, 26278), (113, 26296), (114, 26302), (115, 26332), (118, 26368), (119, 26407),

Gene: Kenna_32 Start: 24964, Stop: 26487, Start Num: 1
Candidate Starts for Kenna_32:
(Start: 1 @24964 has 27 MA's), (4, 25015), (Start: 6 @25033 has 2 MA's), (7, 25048), (8, 25051), (9, 25054), (11, 25072), (12, 25084), (14, 25102), (15, 25108), (17, 25123), (18, 25165), (22, 25204), (25, 25225), (27, 25252), (30, 25303), (31, 25306), (33, 25321), (34, 25324), (38, 25369), (45, 25486), (46, 25489), (47, 25501), (48, 25504), (53, 25549), (54, 25552), (56, 25579), (57, 25588), (58, 25618), (60, 25633), (61, 25636), (63, 25654), (64, 25663), (67, 25696), (71, 25717), (74, 25741), (75, 25750), (76, 25777), (84, 25855), (86, 25915), (90, 26008), (91, 26032), (94, 26077), (96, 26083), (97, 26089), (98, 26092), (100, 26116), (103, 26161), (104, 26191), (106, 26215), (107, 26224), (110, 26299), (111, 26302), (112, 26344), (113, 26362), (114, 26368), (115, 26398), (118, 26434), (119, 26473),

Gene: Kuwabara_32 Start: 24174, Stop: 25697, Start Num: 1
Candidate Starts for Kuwabara_32:
(Start: 1 @24174 has 27 MA's), (4, 24225), (Start: 6 @24243 has 2 MA's), (7, 24258), (8, 24261), (9, 24264), (11, 24282), (12, 24294), (14, 24312), (15, 24318), (17, 24333), (21, 24399), (22, 24414), (25, 24435), (27, 24462), (30, 24513), (31, 24516), (33, 24531), (34, 24534), (38, 24579), (45, 24696), (46, 24699), (48, 24714), (50, 24735), (53, 24759), (54, 24762), (56, 24789), (57, 24798), (58, 24828), (59, 24837), (60, 24843), (61, 24846), (63, 24864), (64, 24873), (67, 24906), (71, 24927), (74, 24951), (75, 24960), (76, 24987), (84, 25065), (86, 25125), (90, 25218), (91, 25242), (92, 25248), (96, 25293), (97, 25299), (98, 25302), (100, 25326), (103, 25371), (106, 25425), (107, 25434), (110, 25509), (111, 25512), (112, 25554), (113, 25572), (114, 25578), (115, 25608), (118, 25644), (119, 25683),

Gene: Leroy_33 Start: 24824, Stop: 26347, Start Num: 1
Candidate Starts for Leroy_33:
(Start: 1 @24824 has 27 MA's), (4, 24875), (5, 24887), (7, 24908), (8, 24911), (9, 24914), (11, 24932), (12, 24944), (14, 24962), (15, 24968), (17, 24983), (21, 25049), (22, 25064), (24, 25079), (25, 25085), (26, 25106), (27, 25112), (29, 25142), (30, 25163), (31, 25166), (33, 25181), (34, 25184), (45, 25346), (46, 25349), (48, 25364), (50, 25385), (53, 25409), (54, 25412), (57, 25448), (58, 25478), (60, 25493), (61, 25496), (63, 25514), (64, 25523), (67, 25556), (71, 25577), (74, 25601), (75, 25610), (76, 25637), (80, 25691), (83, 25712), (84, 25715), (86, 25775), (90, 25868), (91, 25892), (92, 25898), (96, 25943), (97, 25949), (98, 25952), (100, 25976), (102, 26015), (103, 26021), (104, 26051), (106, 26075), (107, 26084), (110, 26159), (111, 26162), (112, 26204), (113, 26222), (114, 26228), (115, 26258), (118, 26294), (119, 26333),

Gene: LitninMcQueen_32 Start: 24641, Stop: 26164, Start Num: 1
Candidate Starts for LitninMcQueen_32:
(Start: 1 @24641 has 27 MA's), (4, 24692), (Start: 6 @24710 has 2 MA's), (7, 24725), (8, 24728), (9, 24731), (11, 24749), (12, 24761), (14, 24779), (15, 24785), (17, 24800), (19, 24845), (22, 24881), (24, 24896), (25, 24902), (27, 24929), (29, 24959), (30, 24980), (31, 24983), (33, 24998), (34, 25001), (36, 25019), (38, 25046), (45, 25163), (46, 25166), (48, 25181), (50, 25202), (53, 25226), (54, 25229), (56, 25256), (57, 25265), (58, 25295), (59, 25304), (61, 25313), (64, 25340), (67, 25373), (71, 25394), (74, 25418), (75, 25427), (76, 25454), (77, 25472), (79, 25499), (83, 25529), (84, 25532), (86, 25592), (89, 25673), (91, 25709), (92, 25715), (94, 25754), (96, 25760), (97, 25766), (98, 25769), (100, 25793), (103, 25838), (104, 25868), (106, 25892), (107, 25901), (110, 25976), (111, 25979), (112, 26021),

(113, 26039), (114, 26045), (115, 26075), (118, 26111), (119, 26150),

Gene: Lutum_33 Start: 24964, Stop: 26487, Start Num: 1
Candidate Starts for Lutum_33:
(Start: 1 @24964 has 27 MA's), (4, 25015), (Start: 6 @25033 has 2 MA's), (7, 25048), (8, 25051), (9, 25054), (11, 25072), (12, 25084), (14, 25102), (15, 25108), (17, 25123), (18, 25165), (22, 25204), (25, 25225), (27, 25252), (30, 25303), (31, 25306), (33, 25321), (34, 25324), (38, 25369), (45, 25486), (46, 25489), (47, 25501), (48, 25504), (53, 25549), (54, 25552), (56, 25579), (57, 25588), (58, 25618), (60, 25633), (61, 25636), (63, 25654), (64, 25663), (67, 25696), (71, 25717), (74, 25741), (75, 25750), (76, 25777), (84, 25855), (86, 25915), (90, 26008), (91, 26032), (94, 26077), (96, 26083), (97, 26089), (98, 26092), (100, 26116), (103, 26161), (104, 26191), (106, 26215), (107, 26224), (110, 26299), (111, 26302), (112, 26344), (113, 26362), (114, 26368), (115, 26398), (118, 26434), (119, 26473),

Gene: MortyNRick_32 Start: 24480, Stop: 26003, Start Num: 1
Candidate Starts for MortyNRick_32:
(Start: 1 @24480 has 27 MA's), (4, 24531), (Start: 6 @24549 has 2 MA's), (7, 24564), (8, 24567), (9, 24570), (11, 24588), (12, 24600), (14, 24618), (15, 24624), (17, 24639), (21, 24705), (22, 24720), (25, 24741), (27, 24768), (30, 24819), (31, 24822), (33, 24837), (34, 24840), (38, 24885), (45, 25002), (46, 25005), (48, 25020), (50, 25041), (53, 25065), (54, 25068), (57, 25104), (58, 25134), (60, 25149), (61, 25152), (63, 25170), (64, 25179), (67, 25212), (71, 25233), (74, 25257), (75, 25266), (76, 25293), (84, 25371), (86, 25431), (90, 25524), (91, 25548), (94, 25593), (96, 25599), (97, 25605), (98, 25608), (100, 25632), (103, 25677), (104, 25707), (106, 25731), (107, 25740), (110, 25815), (111, 25818), (112, 25860), (113, 25878), (115, 25914), (118, 25950), (119, 25989),

Gene: ODay_37 Start: 26711, Stop: 28234, Start Num: 1
Candidate Starts for ODay_37:
(Start: 1 @26711 has 27 MA's), (4, 26762), (Start: 6 @26780 has 2 MA's), (7, 26795), (8, 26798), (9, 26801), (11, 26819), (12, 26831), (14, 26849), (15, 26855), (17, 26870), (22, 26951), (24, 26966), (25, 26972), (26, 26993), (27, 26999), (29, 27029), (30, 27050), (31, 27053), (33, 27068), (34, 27071), (36, 27089), (38, 27116), (45, 27233), (46, 27236), (47, 27248), (48, 27251), (53, 27296), (54, 27299), (56, 27326), (57, 27335), (58, 27365), (60, 27380), (61, 27383), (64, 27410), (74, 27488), (75, 27497), (77, 27542), (79, 27569), (83, 27599), (84, 27602), (86, 27662), (90, 27755), (91, 27779), (92, 27785), (94, 27824), (96, 27830), (97, 27836), (98, 27839), (100, 27863), (103, 27908), (104, 27938), (106, 27962), (107, 27971), (110, 28046), (111, 28049), (112, 28091), (113, 28109), (114, 28115), (115, 28145), (118, 28181), (119, 28220),

Gene: Periwinkle_35 Start: 25268, Stop: 26791, Start Num: 1
Candidate Starts for Periwinkle_35:
(Start: 1 @25268 has 27 MA's), (4, 25319), (5, 25331), (7, 25352), (8, 25355), (9, 25358), (11, 25376), (12, 25388), (14, 25406), (15, 25412), (17, 25427), (21, 25493), (22, 25508), (24, 25523), (25, 25529), (26, 25550), (27, 25556), (29, 25586), (30, 25607), (31, 25610), (33, 25625), (34, 25628), (45, 25790), (46, 25793), (48, 25808), (50, 25829), (53, 25853), (54, 25856), (57, 25892), (58, 25922), (60, 25937), (61, 25940), (63, 25958), (64, 25967), (67, 26000), (71, 26021), (74, 26045), (75, 26054), (76, 26081), (80, 26135), (83, 26156), (84, 26159), (86, 26219), (90, 26312), (91, 26336), (92, 26342), (96, 26387), (97, 26393), (98, 26396), (100, 26420), (102, 26459), (103, 26465), (104, 26495), (106, 26519), (107, 26528), (110, 26603), (111, 26606), (112, 26648), (113, 26666), (114, 26672), (115, 26702), (118, 26738), (119, 26777),

Gene: Phabuloso_32 Start: 24531, Stop: 26054, Start Num: 1
Candidate Starts for Phabuloso_32:
(Start: 1 @24531 has 27 MA's), (4, 24582), (Start: 6 @24600 has 2 MA's), (7, 24615), (8, 24618), (9, 24621), (11, 24639), (12, 24651), (13, 24660), (14, 24669), (15, 24675), (17, 24690), (22, 24771), (25, 24792), (26, 24813), (27, 24819), (29, 24849), (30, 24870), (31, 24873), (33, 24888), (34, 24891), (45,

25053), (46, 25056), (48, 25071), (50, 25092), (53, 25116), (54, 25119), (56, 25146), (57, 25155), (58, 25185), (60, 25200), (61, 25203), (64, 25230), (67, 25263), (71, 25284), (74, 25308), (75, 25317), (76, 25344), (77, 25362), (79, 25389), (83, 25419), (84, 25422), (86, 25482), (89, 25563), (90, 25575), (91, 25599), (92, 25605), (94, 25644), (96, 25650), (97, 25656), (98, 25659), (100, 25683), (103, 25728), (104, 25758), (106, 25782), (107, 25791), (110, 25866), (111, 25869), (112, 25911), (113, 25929), (114, 25935), (115, 25965), (118, 26001), (119, 26040),

Gene: Phistory_34 Start: 25589, Stop: 27112, Start Num: 1
Candidate Starts for Phistory_34:
(Start: 1 @25589 has 27 MA's), (4, 25640), (5, 25652), (7, 25673), (8, 25676), (9, 25679), (11, 25697), (12, 25709), (14, 25727), (15, 25733), (17, 25748), (21, 25814), (22, 25829), (24, 25844), (25, 25850), (26, 25871), (27, 25877), (29, 25907), (30, 25928), (31, 25931), (33, 25946), (34, 25949), (45, 26111), (46, 26114), (48, 26129), (50, 26150), (53, 26174), (54, 26177), (57, 26213), (58, 26243), (60, 26258), (61, 26261), (63, 26279), (64, 26288), (67, 26321), (71, 26342), (74, 26366), (75, 26375), (76, 26402), (80, 26456), (83, 26477), (84, 26480), (86, 26540), (90, 26633), (91, 26657), (92, 26663), (94, 26702), (96, 26708), (97, 26714), (98, 26717), (100, 26741), (103, 26786), (104, 26816), (106, 26840), (107, 26849), (110, 26924), (111, 26927), (112, 26969), (113, 26987), (115, 27023), (118, 27059), (119, 27098),

Gene: ShawBrad_33 Start: 24811, Stop: 26334, Start Num: 1
Candidate Starts for ShawBrad_33:
(Start: 1 @24811 has 27 MA's), (4, 24862), (Start: 6 @24880 has 2 MA's), (7, 24895), (8, 24898), (9, 24901), (11, 24919), (13, 24940), (14, 24949), (15, 24955), (17, 24970), (20, 25030), (21, 25036), (22, 25051), (24, 25066), (25, 25072), (26, 25093), (27, 25099), (30, 25150), (31, 25153), (32, 25156), (33, 25168), (34, 25171), (47, 25348), (48, 25351), (53, 25396), (54, 25399), (56, 25426), (57, 25435), (58, 25465), (59, 25474), (63, 25501), (64, 25510), (70, 25558), (71, 25564), (74, 25588), (75, 25597), (77, 25642), (79, 25669), (82, 25693), (84, 25702), (86, 25762), (91, 25879), (92, 25885), (94, 25924), (96, 25930), (97, 25936), (98, 25939), (100, 25963), (103, 26008), (104, 26038), (106, 26062), (107, 26071), (110, 26146), (111, 26149), (112, 26191), (113, 26209), (114, 26215), (115, 26245), (118, 26281), (119, 26320),

Gene: Suerte_28 Start: 24000, Stop: 25373, Start Num: 1
Candidate Starts for Suerte_28:
(Start: 1 @24000 has 27 MA's), (2, 24021), (9, 24090), (14, 24138), (16, 24150), (23, 24243), (26, 24282), (28, 24309), (35, 24366), (37, 24402), (39, 24417), (41, 24474), (44, 24519), (53, 24585), (55, 24606), (61, 24672), (69, 24744), (78, 24837), (84, 24891), (86, 24951), (87, 24978), (88, 25017), (93, 25092), (95, 25110), (99, 25134), (100, 25146), (101, 25158), (108, 25290), (109, 25299), (110, 25317),

Gene: Thimann_30 Start: 24468, Stop: 25841, Start Num: 1
Candidate Starts for Thimann_30:
(Start: 1 @24468 has 27 MA's), (2, 24489), (9, 24558), (14, 24606), (16, 24618), (23, 24711), (26, 24750), (28, 24777), (35, 24834), (37, 24870), (39, 24885), (44, 24987), (53, 25053), (55, 25074), (61, 25140), (65, 25185), (69, 25212), (78, 25305), (84, 25359), (86, 25419), (87, 25446), (88, 25485), (93, 25560), (95, 25578), (99, 25602), (100, 25614), (101, 25626), (108, 25758), (109, 25767), (110, 25785),

Gene: Whitney_34 Start: 25755, Stop: 27209, Start Num: 6
Candidate Starts for Whitney_34:
(Start: 1 @25686 has 27 MA's), (4, 25737), (Start: 6 @25755 has 2 MA's), (7, 25770), (8, 25773), (9, 25776), (11, 25794), (12, 25806), (14, 25824), (15, 25830), (17, 25845), (22, 25926), (25, 25947), (26, 25968), (27, 25974), (29, 26004), (30, 26025), (31, 26028), (33, 26043), (34, 26046), (36, 26064), (38, 26091), (45, 26208), (46, 26211), (48, 26226), (50, 26247), (53, 26271), (54, 26274), (56, 26301), (57,

26310), (58, 26340), (59, 26349), (61, 26358), (64, 26385), (67, 26418), (71, 26439), (74, 26463), (75, 26472), (76, 26499), (77, 26517), (79, 26544), (83, 26574), (84, 26577), (86, 26637), (89, 26718), (91, 26754), (92, 26760), (94, 26799), (96, 26805), (97, 26811), (98, 26814), (100, 26838), (103, 26883), (104, 26913), (106, 26937), (107, 26946), (110, 27021), (111, 27024), (112, 27066), (113, 27084), (114, 27090), (115, 27120), (118, 27156), (119, 27195),