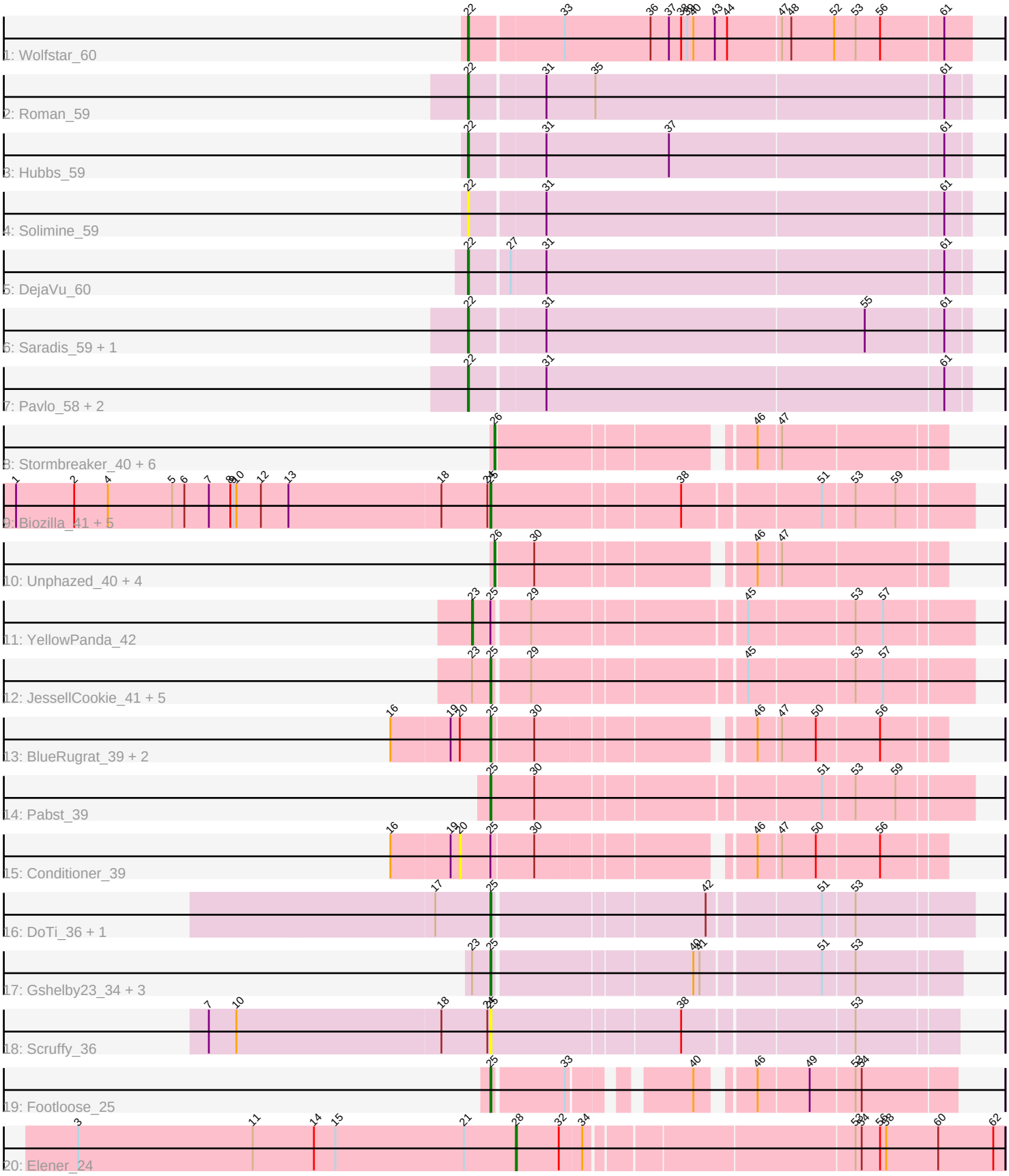
Pham 347729


1: Wolfstar_60
2: Roman_59
3: Hubbs_59
4: Solimine_59
5: DejaVu_60
6: Saradis_59 + 1
7: Pavlo_58 + 2
8: Stormbreaker_40 + 6
9: Biozilla_41 + 5
10: Unphazed_40 + 4
11: YellowPanda_42
12: JessellCookie_41 + 5
13: BlueRugrat_39 + 2
14: Pabst_39
15: Conditioner_39
16: DoTi_36 + 1
17: Gshelby23_34 + 3
18: Scruffy_36
19: Footloose_25
20: Elener_24

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 347729 Report

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

Pham number 347729 has 49 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Wolfstar_60
• Track 2 : Roman_59
• Track 3 : Hubbs_59
• Track 4 : Solimine_59
• Track 5 : DejaVu_60
• Track 6 : Saradis_59, PhillyPhilly_58
• Track 7 : Pavlo_58, Lupine_57, Uterion_62
• Track 8 : Stormbreaker_40, Birdfeeder_38, Alex44_40, Dashyla_39, LilyLou_41, ArMaWen_39, Corn21_39
• Track 9 : Biozilla_41, TicTac_41, HitchHiker_42, CrunchyBoi_42, PineapplePluto_42, Oatly_41
• Track 10 : Unphazed_40, SwissCheezer_39, Phogo_40, DumpQuist_39, Xitlalli_38
• Track 11 : YellowPanda_42
• Track 12 : JessellCookie_41, Wesak_40, TinyTimothy_39, Sorvannah_40, Salvatore2000_40, MiamiPanther_41
• Track 13 : BlueRugrat_39, TownLake_38, LesNorah_40
• Track 14 : Pabst_39
• Track 15 : Conditioner_39
• Track 16 : DoTi_36, Araxxi_36
• Track 17 : Gshelby23_34, Hannabella_36, Casino_35, Arete_36
• Track 18 : Scruffy_36
• Track 19 : Footloose_25
• Track 20 : Elener_24

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 21 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Araxxi_36, Arete_36, Biozilla_41, BlueRugrat_39, Casino_35, CrunchyBoi_42, DoTi_36, Footloose_25, Gshelby23_34, Hannabella_36, HitchHiker_42, JessellCookie_41, LesNorah_40, MiamiPanther_41, Oatly_41, Pabst_39, PineapplePluto_42, Salvatore2000_40, Scruffy_36, Sorvannah_40, TicTac_41,

TinyTimothy_39, TownLake_38, Wesak_40,

Genes that have the "Most Annotated" start but do not call it:
• Conditioner_39, YellowPanda_42,

Genes that do not have the "Most Annotated" start:
• Alex44_40, ArMaWen_39, Birdfeeder_38, Corn21_39, Dashyla_39, DejaVu_60, DumpQuist_39, Elener_24, Hubbs_59, LilyLou_41, Lupine_57, Pavlo_58, PhillyPhilly_58, Phogo_40, Roman_59, Saradis_59, Solimine_59, Stormbreaker_40, SwissCheezer_39, Unphazed_40, Uterion_62, Wolfstar_60, Xitlalli_38,

Summary by start number:

Start 20:
• Found in 4 of 49 (8.2%) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Conditioner_39 (EK1),

Start 22:
• Found in 10 of 49 (20.4%) of genes in pham
• Manual Annotations of this start: 8 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DejaVu_60 (ED1), Hubbs_59 (ED1), Lupine_57 (ED1), Pavlo_58 (ED1), PhillyPhilly_58 (ED1), Roman_59 (ED1), Saradis_59 (ED1), Solimine_59 (ED1), Uterion_62 (ED1), Wolfstar_60 (ED),

Start 23:
• Found in 11 of 49 (22.4%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 9.1% of time when present
• Phage (with cluster) where this start called: YellowPanda_42 (EK1),

Start 25:
• Found in 26 of 49 (53.1%) of genes in pham
• Manual Annotations of this start: 21 of 43
• Called 92.3% of time when present
• Phage (with cluster) where this start called: Araxxi_36 (EM1), Arete_36 (EM1), Biozilla_41 (EK1), BlueRugrat_39 (EK1), Casino_35 (EM1), CrunchyBoi_42 (EK1), DoTi_36 (EM1), Footloose_25 (singleton), Gshelby23_34 (EM1), Hannabella_36 (EM1), HitchHiker_42 (EK1), JessellCookie_41 (EK1), LesNorah_40 (EK1), MiamiPanther_41 (EK1), Oatly_41 (EK1), Pabst_39 (EK1), PineapplePluto_42 (EK1), Salvatore2000_40 (EK1), Scruffy_36 (EM1), Sorvannah_40 (EK1), TicTac_41 (EK1), TinyTimothy_39 (EK1), TownLake_38 (EK1), Wesak_40 (EK1),

Start 26:
• Found in 12 of 49 (24.5%) of genes in pham
• Manual Annotations of this start: 12 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alex44_40 (EK1), ArMaWen_39 (EK1), Birdfeeder_38 (EK1), Corn21_39 (EK1), Dashyla_39 (EK1), DumpQuist_39 (EK1), LilyLou_41 (EK1), Phogo_40 (EK1), Stormbreaker_40 (EK1), SwissCheezer_39 (EK1), Unphazed_40 (EK1), Xitlalli_38 (EK1),

Start 28:
• Found in 1 of 49 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elener_24 (singleton),

Summary by clusters:

There are 5 clusters represented in this pham: ED, singleton, ED1, EM1, EK1,

Info for manual annotations of cluster ED:
•Start number 22 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:
•Start number 22 was manually annotated 7 times for cluster ED1.

Info for manual annotations of cluster EK1:
•Start number 23 was manually annotated 1 time for cluster EK1.
•Start number 25 was manually annotated 14 times for cluster EK1.
•Start number 26 was manually annotated 12 times for cluster EK1.

Info for manual annotations of cluster EM1:
•Start number 25 was manually annotated 6 times for cluster EM1.

Gene Information:

Gene: Alex44_40 Start: 39707, Stop: 40105, Start Num: 26
Candidate Starts for Alex44_40:
(Start: 26 @39707 has 12 MA's), (46, 39932), (47, 39953),

Gene: ArMaWen_39 Start: 39250, Stop: 39648, Start Num: 26
Candidate Starts for ArMaWen_39:
(Start: 26 @39250 has 12 MA's), (46, 39475), (47, 39496),

Gene: Araxxi_36 Start: 42569, Stop: 43006, Start Num: 25
Candidate Starts for Araxxi_36:
(17, 42515), (Start: 25 @42569 has 21 MA's), (42, 42764), (51, 42866), (53, 42896),

Gene: Arete_36 Start: 42315, Stop: 42740, Start Num: 25
Candidate Starts for Arete_36:
(Start: 23 @42297 has 1 MA's), (Start: 25 @42315 has 21 MA's), (40, 42498), (41, 42504), (51, 42612), (53, 42642),

Gene: Biozilla_41 Start: 39627, Stop: 40070, Start Num: 25
Candidate Starts for Biozilla_41:
(1, 39165), (2, 39222), (4, 39255), (5, 39318), (6, 39330), (7, 39354), (8, 39375), (9, 39378), (10, 39381), (12, 39405), (13, 39432), (18, 39579), (24, 39624), (Start: 25 @39627 has 21 MA's), (38, 39804), (51, 39930), (53, 39960), (59, 39999),

Gene: Birdfeeder_38 Start: 39463, Stop: 39861, Start Num: 26

Candidate Starts for Birdfeeder_38:
(Start: 26 @39463 has 12 MA's), (46, 39688), (47, 39709),

Gene: BlueRugrat_39 Start: 39708, Stop: 40106, Start Num: 25
Candidate Starts for BlueRugrat_39:
(16, 39612), (19, 39669), (20, 39678), (Start: 25 @39708 has 21 MA's), (30, 39747), (46, 39933), (47, 39954), (50, 39987), (56, 40047),

Gene: Casino_35 Start: 42287, Stop: 42712, Start Num: 25
Candidate Starts for Casino_35:
(Start: 23 @42269 has 1 MA's), (Start: 25 @42287 has 21 MA's), (40, 42470), (41, 42476), (51, 42584), (53, 42614),

Gene: Conditioner_39 Start: 39751, Stop: 40179, Start Num: 20
Candidate Starts for Conditioner_39:
(16, 39685), (19, 39742), (20, 39751), (Start: 25 @39781 has 21 MA's), (30, 39820), (46, 40006), (47, 40027), (50, 40060), (56, 40120),

Gene: Corn21_39 Start: 39786, Stop: 40184, Start Num: 26
Candidate Starts for Corn21_39:
(Start: 26 @39786 has 12 MA's), (46, 40011), (47, 40032),

Gene: CrunchyBoi_42 Start: 39482, Stop: 39925, Start Num: 25
Candidate Starts for CrunchyBoi_42:
(1, 39020), (2, 39077), (4, 39110), (5, 39173), (6, 39185), (7, 39209), (8, 39230), (9, 39233), (10, 39236), (12, 39260), (13, 39287), (18, 39434), (24, 39479), (Start: 25 @39482 has 21 MA's), (38, 39659), (51, 39785), (53, 39815), (59, 39854),

Gene: Dashyla_39 Start: 39381, Stop: 39779, Start Num: 26
Candidate Starts for Dashyla_39:
(Start: 26 @39381 has 12 MA's), (46, 39606), (47, 39627),

Gene: DejaVu_60 Start: 35358, Stop: 35834, Start Num: 22
Candidate Starts for DejaVu_60:
(Start: 22 @35358 has 8 MA's), (27, 35394), (31, 35427), (61, 35811),

Gene: DoTi_36 Start: 42673, Stop: 43110, Start Num: 25
Candidate Starts for DoTi_36:
(17, 42619), (Start: 25 @42673 has 21 MA's), (42, 42868), (51, 42970), (53, 43000),

Gene: DumpQuist_39 Start: 39235, Stop: 39633, Start Num: 26
Candidate Starts for DumpQuist_39:
(Start: 26 @39235 has 12 MA's), (30, 39271), (46, 39460), (47, 39481),

Gene: Elener_24 Start: 20456, Stop: 20911, Start Num: 28
Candidate Starts for Elener_24:
(3, 20027), (11, 20198), (14, 20258), (15, 20279), (21, 20405), (Start: 28 @20456 has 1 MA's), (32, 20498), (34, 20519), (53, 20765), (54, 20771), (56, 20789), (58, 20795), (60, 20846), (62, 20900),

Gene: Footloose_25 Start: 17686, Stop: 18072, Start Num: 25
Candidate Starts for Footloose_25:
(Start: 25 @17686 has 21 MA's), (33, 17752), (40, 17845), (46, 17887), (49, 17935), (53, 17977), (54, 17983),

Gene: Gshelby23_34 Start: 42222, Stop: 42647, Start Num: 25
Candidate Starts for Gshelby23_34:
(Start: 23 @42204 has 1 MA's), (Start: 25 @42222 has 21 MA's), (40, 42405), (41, 42411), (51, 42519), (53, 42549),

Gene: Hannabella_36 Start: 42263, Stop: 42688, Start Num: 25
Candidate Starts for Hannabella_36:
(Start: 23 @42245 has 1 MA's), (Start: 25 @42263 has 21 MA's), (40, 42446), (41, 42452), (51, 42560), (53, 42590),

Gene: HitchHiker_42 Start: 39627, Stop: 40070, Start Num: 25
Candidate Starts for HitchHiker_42:
(1, 39165), (2, 39222), (4, 39255), (5, 39318), (6, 39330), (7, 39354), (8, 39375), (9, 39378), (10, 39381), (12, 39405), (13, 39432), (18, 39579), (24, 39624), (Start: 25 @39627 has 21 MA's), (38, 39804), (51, 39930), (53, 39960), (59, 39999),

Gene: Hubbs_59 Start: 35570, Stop: 36046, Start Num: 22
Candidate Starts for Hubbs_59:
(Start: 22 @35570 has 8 MA's), (31, 35639), (37, 35759), (61, 36023),

Gene: JessellCookie_41 Start: 41104, Stop: 41541, Start Num: 25
Candidate Starts for JessellCookie_41:
(Start: 23 @41086 has 1 MA's), (Start: 25 @41104 has 21 MA's), (29, 41137), (45, 41332), (53, 41431), (57, 41458),

Gene: LesNorah_40 Start: 40105, Stop: 40503, Start Num: 25
Candidate Starts for LesNorah_40:
(16, 40009), (19, 40066), (20, 40075), (Start: 25 @40105 has 21 MA's), (30, 40144), (46, 40330), (47, 40351), (50, 40384), (56, 40444),

Gene: LilyLou_41 Start: 39699, Stop: 40097, Start Num: 26
Candidate Starts for LilyLou_41:
(Start: 26 @39699 has 12 MA's), (46, 39924), (47, 39945),

Gene: Lupine_57 Start: 34772, Stop: 35248, Start Num: 22
Candidate Starts for Lupine_57:
(Start: 22 @34772 has 8 MA's), (31, 34841), (61, 35225),

Gene: MiamiPanther_41 Start: 41104, Stop: 41541, Start Num: 25
Candidate Starts for MiamiPanther_41:
(Start: 23 @41086 has 1 MA's), (Start: 25 @41104 has 21 MA's), (29, 41137), (45, 41332), (53, 41431), (57, 41458),

Gene: Oatly_41 Start: 39187, Stop: 39630, Start Num: 25
Candidate Starts for Oatly_41:
(1, 38725), (2, 38782), (4, 38815), (5, 38878), (6, 38890), (7, 38914), (8, 38935), (9, 38938), (10, 38941), (12, 38965), (13, 38992), (18, 39139), (24, 39184), (Start: 25 @39187 has 21 MA's), (38, 39364), (51, 39490), (53, 39520), (59, 39559),

Gene: Pabst_39 Start: 39251, Stop: 39694, Start Num: 25
Candidate Starts for Pabst_39:
(Start: 25 @39251 has 21 MA's), (30, 39293), (51, 39554), (53, 39584), (59, 39623),

Gene: Pavlo_58 Start: 35417, Stop: 35893, Start Num: 22
Candidate Starts for Pavlo_58:
(Start: 22 @35417 has 8 MA's), (31, 35486), (61, 35870),

Gene: PhillyPhilly_58 Start: 34951, Stop: 35427, Start Num: 22
Candidate Starts for PhillyPhilly_58:
(Start: 22 @34951 has 8 MA's), (31, 35020), (55, 35329), (61, 35404),

Gene: Phogo_40 Start: 39527, Stop: 39925, Start Num: 26
Candidate Starts for Phogo_40:
(Start: 26 @39527 has 12 MA's), (30, 39563), (46, 39752), (47, 39773),

Gene: PineapplePluto_42 Start: 39549, Stop: 39992, Start Num: 25
Candidate Starts for PineapplePluto_42:
(1, 39087), (2, 39144), (4, 39177), (5, 39240), (6, 39252), (7, 39276), (8, 39297), (9, 39300), (10, 39303), (12, 39327), (13, 39354), (18, 39501), (24, 39546), (Start: 25 @39549 has 21 MA's), (38, 39726), (51, 39852), (53, 39882), (59, 39921),

Gene: Roman_59 Start: 35418, Stop: 35894, Start Num: 22
Candidate Starts for Roman_59:
(Start: 22 @35418 has 8 MA's), (31, 35487), (35, 35535), (61, 35871),

Gene: Salvatore2000_40 Start: 41104, Stop: 41541, Start Num: 25
Candidate Starts for Salvatore2000_40:
(Start: 23 @41086 has 1 MA's), (Start: 25 @41104 has 21 MA's), (29, 41137), (45, 41332), (53, 41431), (57, 41458),

Gene: Saradis_59 Start: 35010, Stop: 35486, Start Num: 22
Candidate Starts for Saradis_59:
(Start: 22 @35010 has 8 MA's), (31, 35079), (55, 35388), (61, 35463),

Gene: Scruffy_36 Start: 42548, Stop: 42976, Start Num: 25
Candidate Starts for Scruffy_36:
(7, 42275), (10, 42302), (18, 42500), (24, 42545), (Start: 25 @42548 has 21 MA's), (38, 42725), (53, 42881),

Gene: Solimine_59 Start: 35424, Stop: 35900, Start Num: 22
Candidate Starts for Solimine_59:
(Start: 22 @35424 has 8 MA's), (31, 35493), (61, 35877),

Gene: Sorvannah_40 Start: 41104, Stop: 41541, Start Num: 25
Candidate Starts for Sorvannah_40:
(Start: 23 @41086 has 1 MA's), (Start: 25 @41104 has 21 MA's), (29, 41137), (45, 41332), (53, 41431), (57, 41458),

Gene: Stormbreaker_40 Start: 39615, Stop: 40013, Start Num: 26
Candidate Starts for Stormbreaker_40:
(Start: 26 @39615 has 12 MA's), (46, 39840), (47, 39861),

Gene: SwissCheezer_39 Start: 39267, Stop: 39665, Start Num: 26
Candidate Starts for SwissCheezer_39:
(Start: 26 @39267 has 12 MA's), (30, 39303), (46, 39492), (47, 39513),

Gene: TicTac_41 Start: 39548, Stop: 39991, Start Num: 25
Candidate Starts for TicTac_41:
(1, 39086), (2, 39143), (4, 39176), (5, 39239), (6, 39251), (7, 39275), (8, 39296), (9, 39299), (10, 39302), (12, 39326), (13, 39353), (18, 39500), (24, 39545), (Start: 25 @39548 has 21 MA's), (38, 39725), (51, 39851), (53, 39881), (59, 39920),

Gene: TinyTimothy_39 Start: 41104, Stop: 41541, Start Num: 25
Candidate Starts for TinyTimothy_39:
(Start: 23 @41086 has 1 MA's), (Start: 25 @41104 has 21 MA's), (29, 41137), (45, 41332), (53, 41431), (57, 41458),

Gene: TownLake_38 Start: 39395, Stop: 39793, Start Num: 25
Candidate Starts for TownLake_38:
(16, 39299), (19, 39356), (20, 39365), (Start: 25 @39395 has 21 MA's), (30, 39434), (46, 39620), (47, 39641), (50, 39674), (56, 39734),

Gene: Unphazed_40 Start: 39491, Stop: 39889, Start Num: 26
Candidate Starts for Unphazed_40:
(Start: 26 @39491 has 12 MA's), (30, 39527), (46, 39716), (47, 39737),

Gene: Uterion_62 Start: 35519, Stop: 35995, Start Num: 22
Candidate Starts for Uterion_62:
(Start: 22 @35519 has 8 MA's), (31, 35588), (61, 35972),

Gene: Wesak_40 Start: 40946, Stop: 41383, Start Num: 25
Candidate Starts for Wesak_40:
(Start: 23 @40928 has 1 MA's), (Start: 25 @40946 has 21 MA's), (29, 40979), (45, 41174), (53, 41273), (57, 41300),

Gene: Wolfstar_60 Start: 36460, Stop: 36939, Start Num: 22
Candidate Starts for Wolfstar_60:
(Start: 22 @36460 has 8 MA's), (33, 36547), (36, 36631), (37, 36649), (38, 36661), (39, 36667), (40, 36673), (43, 36694), (44, 36706), (47, 36757), (48, 36766), (52, 36808), (53, 36829), (56, 36853), (61, 36913),

Gene: Xitlalli_38 Start: 39492, Stop: 39890, Start Num: 26
Candidate Starts for Xitlalli_38:
(Start: 26 @39492 has 12 MA's), (30, 39528), (46, 39717), (47, 39738),

Gene: YellowPanda_42 Start: 40809, Stop: 41264, Start Num: 23
Candidate Starts for YellowPanda_42:
(Start: 23 @40809 has 1 MA's), (Start: 25 @40827 has 21 MA's), (29, 40860), (45, 41055), (53, 41154), (57, 41181),