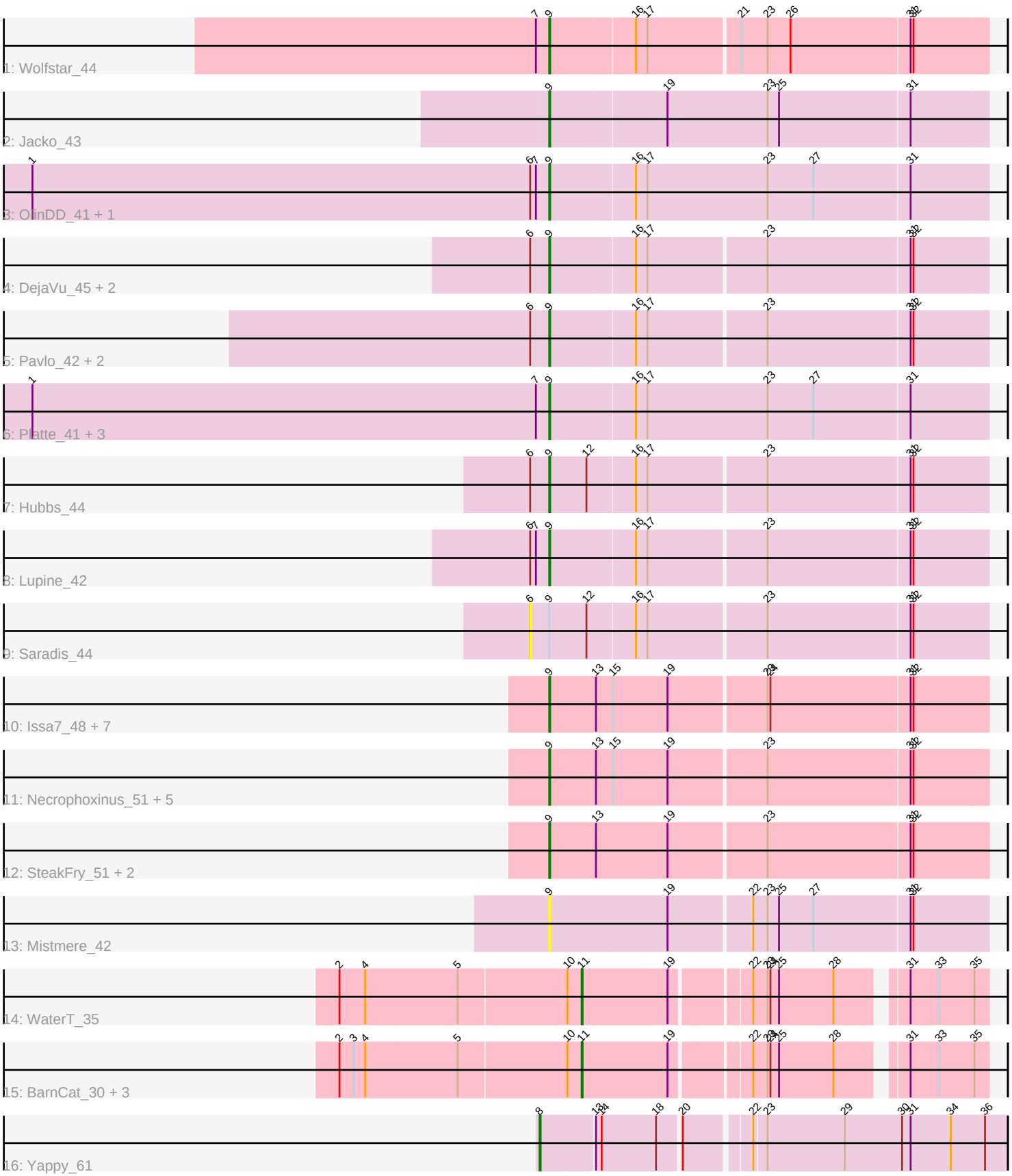
Pham 308839


1: Wolfstar_44
2: Jacko_43
3: OlinDD_41 + 1
4: DejaVu_45 + 2
5: Pavlo_42 + 2
6: Platte_41 + 3
7: Hubbs_44
8: Lupine_42
9: Saradis_44
10: Issa7_48 + 7
11: Necrophoxinus_51 + 5
12: SteakFry_51 + 2
13: Mistmere_42
14: WaterT_35
15: BarnCat_30 + 3
16: Yappy_61

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 308839 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 308839 has 41 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Wolfstar_44
• Track 2 : Jacko_43
• Track 3 : OlinDD_41, Hortus1_41
• Track 4 : DejaVu_45, Solimine_44, PhillyPhilly_43
• Track 5 : Pavlo_42, Roman_44, Uterion_46
• Track 6 : Platte_41, Tandem_41, Pioneer3_41, Alleb_42
• Track 7 : Hubbs_44
• Track 8 : Lupine_42
• Track 9 : Saradis_44
• Track 10 : Issa7_48, Deschain_50, Yuma_48, Fork_45, Welcome_50, Musetta_49, Erenyeager_49, Casablancas_50
• Track 11 : Necrophoxinus_51, DustyDino_52, RunningBrook_50, Lyell_49, ASegato_48, StevieWelch_49
• Track 12 : SteakFry_51, HollowPurple_50, Shroomer_53
• Track 13 : Mistmere_42
• Track 14 : WaterT_35
• Track 15 : BarnCat_30, Lifes_32, LeeroyJenkins_36, Cassita_36
• Track 16 : Yappy_61

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

The start number called the most often in the published annotations is 9, it was called in 29 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ASegato_48, Alleb_42, Casablancas_50, DejaVu_45, Deschain_50, DustyDino_52, Erenyeager_49, Fork_45, HollowPurple_50, Hortus1_41, Hubbs_44, Issa7_48, Jacko_43, Lupine_42, Lyell_49, Mistmere_42, Musetta_49, Necrophoxinus_51, OlinDD_41, Pavlo_42, PhillyPhilly_43, Pioneer3_41, Platte_41, Roman_44, RunningBrook_50, Shroomer_53, Solimine_44, SteakFry_51, StevieWelch_49,

Tandem_41, Uterion_46, Welcome_50, Wolfstar_44, Yuma_48,

Genes that have the "Most Annotated" start but do not call it:
• Saradis_44,

Genes that do not have the "Most Annotated" start:
• BarnCat_30, Cassita_36, LeeroyJenkins_36, Lifes_32, WaterT_35, Yappy_61,

Summary by start number:

Start 6:
• Found in 11 of 41 (26.8%) of genes in pham
• No Manual Annotations of this start.
• Called 9.1% of time when present
• Phage (with cluster) where this start called: Saradis_44 (ED1),

Start 8:
• Found in 1 of 41 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yappy_61 (singleton),

Start 9:
• Found in 35 of 41 (85.4%) of genes in pham
• Manual Annotations of this start: 29 of 35
• Called 97.1% of time when present
• Phage (with cluster) where this start called: ASegato_48 (ED2), Alleb_42 (ED1), Casablancas_50 (ED2), DejaVu_45 (ED1), Deschain_50 (ED2), DustyDino_52 (ED2), Erenyeager_49 (ED2), Fork_45 (ED2), HollowPurple_50 (ED2), Hortus1_41 (ED1), Hubbs_44 (ED1), Issa7_48 (ED2), Jacko_43 (ED1), Lupine_42 (ED1), Lyell_49 (ED2), Mistmere_42 (ED3), Musetta_49 (ED2), Necrophoxinus_51 (ED2), OlinDD_41 (ED1), Pavlo_42 (ED1), PhillyPhilly_43 (ED1), Pioneer3_41 (ED1), Platte_41 (ED1), Roman_44 (ED1), RunningBrook_50 (ED2), Shroomer_53 (ED2), Solimine_44 (ED1), SteakFry_51 (ED2), StevieWelch_49 (ED2), Tandem_41 (ED1), Uterion_46 (ED1), Welcome_50 (ED2), Wolfstar_44 (ED), Yuma_48 (ED2),

Start 11:
• Found in 5 of 41 (12.2%) of genes in pham
• Manual Annotations of this start: 5 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BarnCat_30 (GB), Cassita_36 (GB), LeeroyJenkins_36 (GB), Lifes_32 (GB), WaterT_35 (GB),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, ED, ED2, ED3, ED1, GB,

Info for manual annotations of cluster ED:
•Start number 9 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:
•Start number 9 was manually annotated 13 times for cluster ED1.

Info for manual annotations of cluster ED2:
•Start number 9 was manually annotated 15 times for cluster ED2.

Info for manual annotations of cluster GB:
•Start number 11 was manually annotated 5 times for cluster GB.

Gene Information:

Gene: ASegato_48 Start: 22826, Stop: 23275, Start Num: 9
Candidate Starts for ASegato_48:
(Start: 9 @22826 has 29 MA's), (13, 22874), (15, 22892), (19, 22949), (23, 23048), (31, 23195), (32, 23198),

Gene: Alleb_42 Start: 21899, Stop: 22351, Start Num: 9
Candidate Starts for Alleb_42:
(1, 21359), (7, 21887), (Start: 9 @21899 has 29 MA's), (16, 21986), (17, 21998), (23, 22124), (27, 22172), (31, 22271),

Gene: BarnCat_30 Start: 16229, Stop: 16618, Start Num: 11
Candidate Starts for BarnCat_30:
(2, 15980), (3, 15995), (4, 16007), (5, 16103), (10, 16214), (Start: 11 @16229 has 5 MA's), (19, 16319), (22, 16394), (23, 16409), (24, 16412), (25, 16421), (28, 16478), (31, 16538), (33, 16568), (35, 16604),

Gene: Casablancas_50 Start: 22914, Stop: 23363, Start Num: 9
Candidate Starts for Casablancas_50:
(Start: 9 @22914 has 29 MA's), (13, 22962), (15, 22980), (19, 23037), (23, 23136), (24, 23139), (31, 23283), (32, 23286),

Gene: Cassita_36 Start: 18605, Stop: 18994, Start Num: 11
Candidate Starts for Cassita_36:
(2, 18356), (3, 18371), (4, 18383), (5, 18479), (10, 18590), (Start: 11 @18605 has 5 MA's), (19, 18695), (22, 18770), (23, 18785), (24, 18788), (25, 18797), (28, 18854), (31, 18914), (33, 18944), (35, 18980),

Gene: DejaVu_45 Start: 22081, Stop: 22527, Start Num: 9
Candidate Starts for DejaVu_45:
(6, 22063), (Start: 9 @22081 has 29 MA's), (16, 22168), (17, 22180), (23, 22300), (31, 22447), (32, 22450),

Gene: Deschain_50 Start: 23578, Stop: 24027, Start Num: 9
Candidate Starts for Deschain_50:
(Start: 9 @23578 has 29 MA's), (13, 23626), (15, 23644), (19, 23701), (23, 23800), (24, 23803), (31, 23947), (32, 23950),

Gene: DustyDino_52 Start: 23770, Stop: 24219, Start Num: 9
Candidate Starts for DustyDino_52:
(Start: 9 @23770 has 29 MA's), (13, 23818), (15, 23836), (19, 23893), (23, 23992), (31, 24139), (32, 24142),

Gene: Erenyeager_49 Start: 23164, Stop: 23613, Start Num: 9
Candidate Starts for Erenyeager_49:

(Start: 9 @23164 has 29 MA's), (13, 23212), (15, 23230), (19, 23287), (23, 23386), (24, 23389), (31, 23533), (32, 23536),

Gene: Fork_45 Start: 22479, Stop: 22928, Start Num: 9
Candidate Starts for Fork_45:
(Start: 9 @22479 has 29 MA's), (13, 22527), (15, 22545), (19, 22602), (23, 22701), (24, 22704), (31, 22848), (32, 22851),

Gene: HollowPurple_50 Start: 23033, Stop: 23482, Start Num: 9
Candidate Starts for HollowPurple_50:
(Start: 9 @23033 has 29 MA's), (13, 23081), (19, 23156), (23, 23255), (31, 23402), (32, 23405),

Gene: Hortus1_41 Start: 21889, Stop: 22341, Start Num: 9
Candidate Starts for Hortus1_41:
(1, 21349), (6, 21871), (7, 21877), (Start: 9 @21889 has 29 MA's), (16, 21976), (17, 21988), (23, 22114), (27, 22162), (31, 22261),

Gene: Hubbs_44 Start: 22293, Stop: 22739, Start Num: 9
Candidate Starts for Hubbs_44:
(6, 22275), (Start: 9 @22293 has 29 MA's), (12, 22332), (16, 22380), (17, 22392), (23, 22512), (31, 22659), (32, 22662),

Gene: Issa7_48 Start: 22481, Stop: 22930, Start Num: 9
Candidate Starts for Issa7_48:
(Start: 9 @22481 has 29 MA's), (13, 22529), (15, 22547), (19, 22604), (23, 22703), (24, 22706), (31, 22850), (32, 22853),

Gene: Jacko_43 Start: 20081, Stop: 20533, Start Num: 9
Candidate Starts for Jacko_43:
(Start: 9 @20081 has 29 MA's), (19, 20201), (23, 20306), (25, 20318), (31, 20453),

Gene: LeeroyJenkins_36 Start: 18536, Stop: 18925, Start Num: 11
Candidate Starts for LeeroyJenkins_36:
(2, 18287), (3, 18302), (4, 18314), (5, 18410), (10, 18521), (Start: 11 @18536 has 5 MA's), (19, 18626), (22, 18701), (23, 18716), (24, 18719), (25, 18728), (28, 18785), (31, 18845), (33, 18875), (35, 18911),

Gene: Lifes_32 Start: 16260, Stop: 16649, Start Num: 11
Candidate Starts for Lifes_32:
(2, 16011), (3, 16026), (4, 16038), (5, 16134), (10, 16245), (Start: 11 @16260 has 5 MA's), (19, 16350), (22, 16425), (23, 16440), (24, 16443), (25, 16452), (28, 16509), (31, 16569), (33, 16599), (35, 16635),

Gene: Lupine_42 Start: 21494, Stop: 21940, Start Num: 9
Candidate Starts for Lupine_42:
(6, 21476), (7, 21482), (Start: 9 @21494 has 29 MA's), (16, 21581), (17, 21593), (23, 21713), (31, 21860), (32, 21863),

Gene: Lyell_49 Start: 23083, Stop: 23532, Start Num: 9
Candidate Starts for Lyell_49:
(Start: 9 @23083 has 29 MA's), (13, 23131), (15, 23149), (19, 23206), (23, 23305), (31, 23452), (32, 23455),

Gene: Mistmere_42 Start: 20953, Stop: 21402, Start Num: 9
Candidate Starts for Mistmere_42:

(Start: 9 @20953 has 29 MA's), (19, 21076), (22, 21160), (23, 21175), (25, 21187), (27, 21223), (31, 21322), (32, 21325),

Gene: Musetta_49 Start: 23197, Stop: 23646, Start Num: 9
Candidate Starts for Musetta_49:
(Start: 9 @23197 has 29 MA's), (13, 23245), (15, 23263), (19, 23320), (23, 23419), (24, 23422), (31, 23566), (32, 23569),

Gene: Necrophoxinus_51 Start: 23778, Stop: 24227, Start Num: 9
Candidate Starts for Necrophoxinus_51:
(Start: 9 @23778 has 29 MA's), (13, 23826), (15, 23844), (19, 23901), (23, 24000), (31, 24147), (32, 24150),

Gene: OlinDD_41 Start: 21888, Stop: 22340, Start Num: 9
Candidate Starts for OlinDD_41:
(1, 21348), (6, 21870), (7, 21876), (Start: 9 @21888 has 29 MA's), (16, 21975), (17, 21987), (23, 22113), (27, 22161), (31, 22260),

Gene: Pavlo_42 Start: 21772, Stop: 22218, Start Num: 9
Candidate Starts for Pavlo_42:
(6, 21754), (Start: 9 @21772 has 29 MA's), (16, 21859), (17, 21871), (23, 21991), (31, 22138), (32, 22141),

Gene: PhillyPhilly_43 Start: 21674, Stop: 22120, Start Num: 9
Candidate Starts for PhillyPhilly_43:
(6, 21656), (Start: 9 @21674 has 29 MA's), (16, 21761), (17, 21773), (23, 21893), (31, 22040), (32, 22043),

Gene: Pioneer3_41 Start: 21896, Stop: 22348, Start Num: 9
Candidate Starts for Pioneer3_41:
(1, 21356), (7, 21884), (Start: 9 @21896 has 29 MA's), (16, 21983), (17, 21995), (23, 22121), (27, 22169), (31, 22268),

Gene: Platte_41 Start: 21681, Stop: 22133, Start Num: 9
Candidate Starts for Platte_41:
(1, 21141), (7, 21669), (Start: 9 @21681 has 29 MA's), (16, 21768), (17, 21780), (23, 21906), (27, 21954), (31, 22053),

Gene: Roman_44 Start: 22140, Stop: 22586, Start Num: 9
Candidate Starts for Roman_44:
(6, 22122), (Start: 9 @22140 has 29 MA's), (16, 22227), (17, 22239), (23, 22359), (31, 22506), (32, 22509),

Gene: RunningBrook_50 Start: 23770, Stop: 24219, Start Num: 9
Candidate Starts for RunningBrook_50:
(Start: 9 @23770 has 29 MA's), (13, 23818), (15, 23836), (19, 23893), (23, 23992), (31, 24139), (32, 24142),

Gene: Saradis_44 Start: 21714, Stop: 22178, Start Num: 6
Candidate Starts for Saradis_44:
(6, 21714), (Start: 9 @21732 has 29 MA's), (12, 21771), (16, 21819), (17, 21831), (23, 21951), (31, 22098), (32, 22101),

Gene: Shroomer_53 Start: 23310, Stop: 23759, Start Num: 9
Candidate Starts for Shroomer_53:
(Start: 9 @23310 has 29 MA's), (13, 23358), (19, 23433), (23, 23532), (31, 23679), (32, 23682),

Gene: Solimine_44 Start: 22147, Stop: 22593, Start Num: 9
Candidate Starts for Solimine_44:
(6, 22129), (Start: 9 @22147 has 29 MA's), (16, 22234), (17, 22246), (23, 22366), (31, 22513), (32, 22516),

Gene: SteakFry_51 Start: 23033, Stop: 23482, Start Num: 9
Candidate Starts for SteakFry_51:
(Start: 9 @23033 has 29 MA's), (13, 23081), (19, 23156), (23, 23255), (31, 23402), (32, 23405),

Gene: StevieWelch_49 Start: 23165, Stop: 23614, Start Num: 9
Candidate Starts for StevieWelch_49:
(Start: 9 @23165 has 29 MA's), (13, 23213), (15, 23231), (19, 23288), (23, 23387), (31, 23534), (32, 23537),

Gene: Tandem_41 Start: 21835, Stop: 22287, Start Num: 9
Candidate Starts for Tandem_41:
(1, 21295), (7, 21823), (Start: 9 @21835 has 29 MA's), (16, 21922), (17, 21934), (23, 22060), (27, 22108), (31, 22207),

Gene: Uterion_46 Start: 22242, Stop: 22688, Start Num: 9
Candidate Starts for Uterion_46:
(6, 22224), (Start: 9 @22242 has 29 MA's), (16, 22329), (17, 22341), (23, 22461), (31, 22608), (32, 22611),

Gene: WaterT_35 Start: 18349, Stop: 18738, Start Num: 11
Candidate Starts for WaterT_35:
(2, 18100), (4, 18127), (5, 18223), (10, 18334), (Start: 11 @18349 has 5 MA's), (19, 18439), (22, 18514), (23, 18529), (24, 18532), (25, 18541), (28, 18598), (31, 18658), (33, 18688), (35, 18724),

Gene: Welcome_50 Start: 23182, Stop: 23631, Start Num: 9
Candidate Starts for Welcome_50:
(Start: 9 @23182 has 29 MA's), (13, 23230), (15, 23248), (19, 23305), (23, 23404), (24, 23407), (31, 23551), (32, 23554),

Gene: Wolfstar_44 Start: 21675, Stop: 22121, Start Num: 9
Candidate Starts for Wolfstar_44:
(7, 21663), (Start: 9 @21675 has 29 MA's), (16, 21762), (17, 21774), (21, 21867), (23, 21894), (26, 21918), (31, 22041), (32, 22044),

Gene: Yappy_61 Start: 21536, Stop: 22000, Start Num: 8
Candidate Starts for Yappy_61:
(Start: 8 @21536 has 1 MA's), (13, 21590), (14, 21596), (18, 21653), (20, 21674), (22, 21737), (23, 21749), (29, 21830), (30, 21890), (31, 21899), (34, 21941), (36, 21977),

Gene: Yuma_48 Start: 23097, Stop: 23546, Start Num: 9
Candidate Starts for Yuma_48:
(Start: 9 @23097 has 29 MA's), (13, 23145), (15, 23163), (19, 23220), (23, 23319), (24, 23322), (31, 23466), (32, 23469),