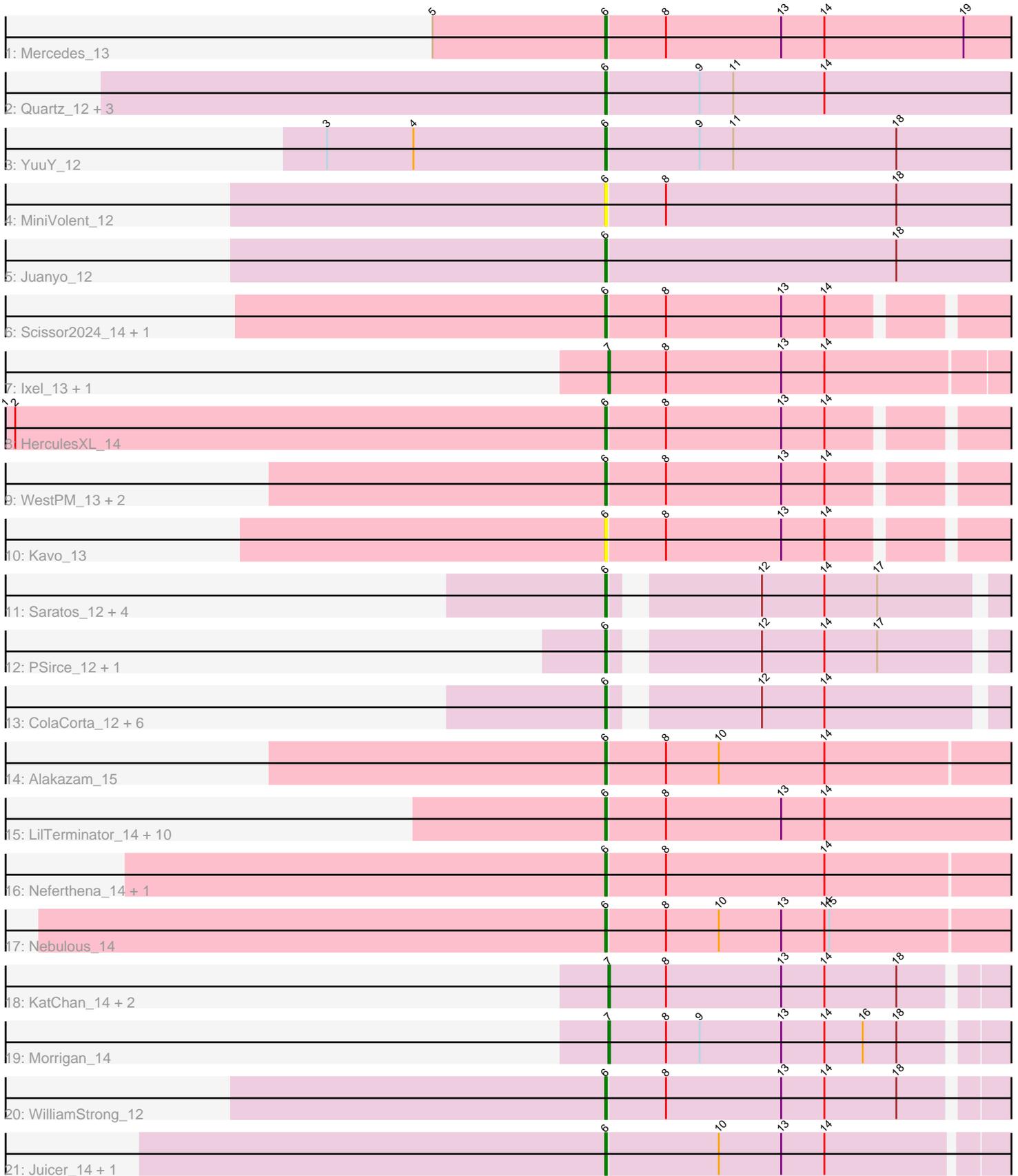# Pham 291228

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 291228 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291228 has 53 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Mercedes_13
• Track 2 : Quartz_12, Mandalorian_12, Nucci_12, Carostasia_12
• Track 3 : YuuY_12
• Track 4 : MiniVolent_12
• Track 5 : Juanyo_12
• Track 6 : Scissor2024_14, Tinyman4_14
• Track 7 : Ixel_13, TwoBits_12
• Track 8 : HerculesXL_14
• Track 9 : WestPM_13, Penta_13, Schimmels22_14
• Track 10 : Kavo_13
• Track 11 : Saratos_12, Eleri_12, Shamu_12, Glamour_11, Finny_12
• Track 12 : PSirce_12, Xebius_11
• Track 13 : ColaCorta_12, Sansa_11, ChikPic_12, Zenitsu_12, Andromedas_12, MCubed_12, Phanita_12
• Track 14 : Alakazam_15
• Track 15 : LilTerminator_14, Zepp_15, Fulton_14, BaronJohn_14, QuadZero_14, Hasitha_14, CaptainRex_14, Zayuliv_14, Librie_14, Wardwill_15, GreenIvy_14
• Track 16 : Neferthena_14, Clock_14
• Track 17 : Nebulous_14
• Track 18 : KatChan_14, Luna18_14, Chepli_14
• Track 19 : Morrigan_14
• Track 20 : WilliamStrong_12
• Track 21 : Juicer_14, Jemerald_14

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

The start number called the most often in the published annotations is 6, it was called in 40 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alakazam_15, Andromedas_12, BaronJohn_14, CaptainRex_14, Carostasia_12, ChikPic_12, Clock_14, ColaCorta_12, Eleri_12, Finny_12, Fulton_14, Glamour_11, GreenIvy_14, Hasitha_14, HerculesXL_14, Jemerald_14, Juanyo_12, Juicer_14, Kavo_13, Librie_14, LilTerminator_14, MCubed_12, Mandalorian_12, Mercedes_13,

MiniVolent_12, Nebulous_14, Neferthena_14, Nucci_12, PSirce_12, Penta_13, Phanita_12, QuadZero_14, Quartz_12, Sansa_11, Saratos_12, Schimmels22_14, Scissor2024_14, Shamu_12, Tinyman4_14, Wardwill_15, WestPM_13, WilliamStrong_12, Xebius_11, YuuY_12, Zayuliv_14, Zenitsu_12, Zepp_15,

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

Genes that do not have the "Most Annotated" start:
• Chepli_14, Ixel_13, KatChan_14, Luna18_14, Morrigan_14, TwoBits_12,

Summary by start number:

Start 6:
• Found in 47 of 53 (88.7%) of genes in pham
• Manual Annotations of this start: 40 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alakazam_15 (EA5), Andromedas_12 (EA2), BaronJohn_14 (EA5), CaptainRex_14 (EA5), Carostasia_12 (EA10), ChikPic_12 (EA2), Clock_14 (EA5), ColaCorta_12 (EA2), Eleri_12 (EA2), Finny_12 (EA2), Fulton_14 (EA5), Glamour_11 (EA2), GreenIvy_14 (EA5), Hasitha_14 (EA5), HerculesXL_14 (EA11), Jemerald_14 (EA6), Juanyo_12 (EA10), Juicer_14 (EA6), Kavo_13 (EA11), Librie_14 (EA5), LilTerminator_14 (EA5), MCubed_12 (EA2), Mandalorian_12 (EA10), Mercedes_13 (EA), MiniVolent_12 (EA10), Nebulous_14 (EA5), Neferthena_14 (EA5), Nucci_12 (EA10), PSirce_12 (EA2), Penta_13 (EA11), Phanita_12 (EA2), QuadZero_14 (EA5), Quartz_12 (EA10), Sansa_11 (EA2), Saratos_12 (EA2), Schimmels22_14 (EA11), Scissor2024_14 (EA11), Shamu_12 (EA2), Tinyman4_14 (EA11), Wardwill_15 (EA5), WestPM_13 (EA11), WilliamStrong_12 (EA6), Xebius_11 (EA2), YuuY_12 (EA10), Zayuliv_14 (EA5), Zenitsu_12 (EA2), Zepp_15 (EA5),

Start 7:
• Found in 6 of 53 (11.3%) of genes in pham
• Manual Annotations of this start: 5 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chepli_14 (EA6), Ixel_13 (EA11), KatChan_14 (EA6), Luna18_14 (EA6), Morrigan_14 (EA6), TwoBits_12 (EA5),

Summary by clusters:

There are 6 clusters represented in this pham: EA11, EA10, EA, EA2, EA5, EA6,

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

Info for manual annotations of cluster EA10:
•Start number 6 was manually annotated 6 times for cluster EA10.

Info for manual annotations of cluster EA11:
•Start number 6 was manually annotated 4 times for cluster EA11.
•Start number 7 was manually annotated 1 time for cluster EA11.

Info for manual annotations of cluster EA2:

•Start number 6 was manually annotated 13 times for cluster EA2.

Info for manual annotations of cluster EA5:
•Start number 6 was manually annotated 13 times for cluster EA5.

Info for manual annotations of cluster EA6:
•Start number 6 was manually annotated 3 times for cluster EA6.
•Start number 7 was manually annotated 4 times for cluster EA6.

Gene Information:

Gene: Alakazam_15 Start: 8832, Stop: 9137, Start Num: 6
Candidate Starts for Alakazam_15:
(Start: 6 @8832 has 40 MA's), (8, 8868), (10, 8901), (14, 8967),

Gene: Andromedas_12 Start: 7650, Stop: 7910, Start Num: 6
Candidate Starts for Andromedas_12:
(Start: 6 @7650 has 40 MA's), (12, 7728), (14, 7767),

Gene: BaronJohn_14 Start: 8032, Stop: 8364, Start Num: 6
Candidate Starts for BaronJohn_14:
(Start: 6 @8032 has 40 MA's), (8, 8068), (13, 8140), (14, 8167),

Gene: CaptainRex_14 Start: 8035, Stop: 8367, Start Num: 6
Candidate Starts for CaptainRex_14:
(Start: 6 @8035 has 40 MA's), (8, 8071), (13, 8143), (14, 8170),

Gene: Carostasia_12 Start: 7815, Stop: 8102, Start Num: 6
Candidate Starts for Carostasia_12:
(Start: 6 @7815 has 40 MA's), (9, 7872), (11, 7893), (14, 7950),

Gene: Chepli_14 Start: 8030, Stop: 8344, Start Num: 7
Candidate Starts for Chepli_14:
(Start: 7 @8030 has 5 MA's), (8, 8066), (13, 8138), (14, 8165), (18, 8210),

Gene: ChikPic_12 Start: 7666, Stop: 7926, Start Num: 6
Candidate Starts for ChikPic_12:
(Start: 6 @7666 has 40 MA's), (12, 7744), (14, 7783),

Gene: Clock_14 Start: 8762, Stop: 9085, Start Num: 6
Candidate Starts for Clock_14:
(Start: 6 @8762 has 40 MA's), (8, 8798), (14, 8897),

Gene: ColaCorta_12 Start: 7650, Stop: 7910, Start Num: 6
Candidate Starts for ColaCorta_12:
(Start: 6 @7650 has 40 MA's), (12, 7728), (14, 7767),

Gene: Eleri_12 Start: 7663, Stop: 7923, Start Num: 6
Candidate Starts for Eleri_12:
(Start: 6 @7663 has 40 MA's), (12, 7741), (14, 7780), (17, 7813),

Gene: Finny_12 Start: 7650, Stop: 7910, Start Num: 6
Candidate Starts for Finny_12:
(Start: 6 @7650 has 40 MA's), (12, 7728), (14, 7767), (17, 7800),

Gene: Fulton_14 Start: 8017, Stop: 8349, Start Num: 6
Candidate Starts for Fulton_14:
(Start: 6 @8017 has 40 MA's), (8, 8053), (13, 8125), (14, 8152),

Gene: Glamour_11 Start: 7651, Stop: 7911, Start Num: 6
Candidate Starts for Glamour_11:
(Start: 6 @7651 has 40 MA's), (12, 7729), (14, 7768), (17, 7801),

Gene: GreenIvy_14 Start: 8034, Stop: 8366, Start Num: 6
Candidate Starts for GreenIvy_14:
(Start: 6 @8034 has 40 MA's), (8, 8070), (13, 8142), (14, 8169),

Gene: Hasitha_14 Start: 8035, Stop: 8367, Start Num: 6
Candidate Starts for Hasitha_14:
(Start: 6 @8035 has 40 MA's), (8, 8071), (13, 8143), (14, 8170),

Gene: HerculesXL_14 Start: 8142, Stop: 8444, Start Num: 6
Candidate Starts for HerculesXL_14:
(1, 7767), (2, 7773), (Start: 6 @8142 has 40 MA's), (8, 8178), (13, 8250), (14, 8277),

Gene: Ixel_13 Start: 7700, Stop: 8020, Start Num: 7
Candidate Starts for Ixel_13:
(Start: 7 @7700 has 5 MA's), (8, 7736), (13, 7808), (14, 7835),

Gene: Jemerald_14 Start: 8998, Stop: 9297, Start Num: 6
Candidate Starts for Jemerald_14:
(Start: 6 @8998 has 40 MA's), (10, 9067), (13, 9106), (14, 9133),

Gene: Juanyo_12 Start: 7777, Stop: 8067, Start Num: 6
Candidate Starts for Juanyo_12:
(Start: 6 @7777 has 40 MA's), (18, 7957),

Gene: Juicer_14 Start: 8998, Stop: 9297, Start Num: 6
Candidate Starts for Juicer_14:
(Start: 6 @8998 has 40 MA's), (10, 9067), (13, 9106), (14, 9133),

Gene: KatChan_14 Start: 8036, Stop: 8350, Start Num: 7
Candidate Starts for KatChan_14:
(Start: 7 @8036 has 5 MA's), (8, 8072), (13, 8144), (14, 8171), (18, 8216),

Gene: Kavo_13 Start: 7974, Stop: 8276, Start Num: 6
Candidate Starts for Kavo_13:
(Start: 6 @7974 has 40 MA's), (8, 8010), (13, 8082), (14, 8109),

Gene: Librie_14 Start: 8035, Stop: 8367, Start Num: 6
Candidate Starts for Librie_14:
(Start: 6 @8035 has 40 MA's), (8, 8071), (13, 8143), (14, 8170),

Gene: LilTerminator_14 Start: 8041, Stop: 8373, Start Num: 6

Candidate Starts for LilTerminator_14:
(Start: 6 @8041 has 40 MA's), (8, 8077), (13, 8149), (14, 8176),

Gene: Luna18_14 Start: 8036, Stop: 8350, Start Num: 7
Candidate Starts for Luna18_14:
(Start: 7 @8036 has 5 MA's), (8, 8072), (13, 8144), (14, 8171), (18, 8216),

Gene: MCubed_12 Start: 7675, Stop: 7935, Start Num: 6
Candidate Starts for MCubed_12:
(Start: 6 @7675 has 40 MA's), (12, 7753), (14, 7792),

Gene: Mandalorian_12 Start: 7814, Stop: 8101, Start Num: 6
Candidate Starts for Mandalorian_12:
(Start: 6 @7814 has 40 MA's), (9, 7871), (11, 7892), (14, 7949),

Gene: Mercedes_13 Start: 7790, Stop: 8113, Start Num: 6
Candidate Starts for Mercedes_13:
(5, 7682), (Start: 6 @7790 has 40 MA's), (8, 7826), (13, 7898), (14, 7925), (19, 8012),

Gene: MiniVolent_12 Start: 7763, Stop: 8053, Start Num: 6
Candidate Starts for MiniVolent_12:
(Start: 6 @7763 has 40 MA's), (8, 7799), (18, 7943),

Gene: Morrigan_14 Start: 8937, Stop: 9251, Start Num: 7
Candidate Starts for Morrigan_14:
(Start: 7 @8937 has 5 MA's), (8, 8973), (9, 8994), (13, 9045), (14, 9072), (16, 9096), (18, 9117),

Gene: Nebulous_14 Start: 8771, Stop: 9094, Start Num: 6
Candidate Starts for Nebulous_14:
(Start: 6 @8771 has 40 MA's), (8, 8807), (10, 8840), (13, 8879), (14, 8906), (15, 8909),

Gene: Neferthena_14 Start: 8782, Stop: 9105, Start Num: 6
Candidate Starts for Neferthena_14:
(Start: 6 @8782 has 40 MA's), (8, 8818), (14, 8917),

Gene: Nucci_12 Start: 7802, Stop: 8089, Start Num: 6
Candidate Starts for Nucci_12:
(Start: 6 @7802 has 40 MA's), (9, 7859), (11, 7880), (14, 7937),

Gene: PSirce_12 Start: 7662, Stop: 7922, Start Num: 6
Candidate Starts for PSirce_12:
(Start: 6 @7662 has 40 MA's), (12, 7740), (14, 7779), (17, 7812),

Gene: Penta_13 Start: 7971, Stop: 8273, Start Num: 6
Candidate Starts for Penta_13:
(Start: 6 @7971 has 40 MA's), (8, 8007), (13, 8079), (14, 8106),

Gene: Phanita_12 Start: 7650, Stop: 7910, Start Num: 6
Candidate Starts for Phanita_12:
(Start: 6 @7650 has 40 MA's), (12, 7728), (14, 7767),

Gene: QuadZero_14 Start: 8047, Stop: 8379, Start Num: 6
Candidate Starts for QuadZero_14:

(Start: 6 @8047 has 40 MA's), (8, 8083), (13, 8155), (14, 8182),

Gene: Quartz_12 Start: 7815, Stop: 8102, Start Num: 6
Candidate Starts for Quartz_12:
(Start: 6 @7815 has 40 MA's), (9, 7872), (11, 7893), (14, 7950),

Gene: Sansa_11 Start: 7671, Stop: 7931, Start Num: 6
Candidate Starts for Sansa_11:
(Start: 6 @7671 has 40 MA's), (12, 7749), (14, 7788),

Gene: Saratos_12 Start: 7651, Stop: 7911, Start Num: 6
Candidate Starts for Saratos_12:
(Start: 6 @7651 has 40 MA's), (12, 7729), (14, 7768), (17, 7801),

Gene: Schimmels22_14 Start: 8501, Stop: 8803, Start Num: 6
Candidate Starts for Schimmels22_14:
(Start: 6 @8501 has 40 MA's), (8, 8537), (13, 8609), (14, 8636),

Gene: Scissor2024_14 Start: 8139, Stop: 8441, Start Num: 6
Candidate Starts for Scissor2024_14:
(Start: 6 @8139 has 40 MA's), (8, 8175), (13, 8247), (14, 8274),

Gene: Shamu_12 Start: 7663, Stop: 7923, Start Num: 6
Candidate Starts for Shamu_12:
(Start: 6 @7663 has 40 MA's), (12, 7741), (14, 7780), (17, 7813),

Gene: Tinyman4_14 Start: 8142, Stop: 8444, Start Num: 6
Candidate Starts for Tinyman4_14:
(Start: 6 @8142 has 40 MA's), (8, 8178), (13, 8250), (14, 8277),

Gene: TwoBits_12 Start: 7838, Stop: 8170, Start Num: 7
Candidate Starts for TwoBits_12:
(Start: 7 @7838 has 5 MA's), (8, 7874), (13, 7946), (14, 7973),

Gene: Wardwill_15 Start: 8203, Stop: 8535, Start Num: 6
Candidate Starts for Wardwill_15:
(Start: 6 @8203 has 40 MA's), (8, 8239), (13, 8311), (14, 8338),

Gene: WestPM_13 Start: 7980, Stop: 8282, Start Num: 6
Candidate Starts for WestPM_13:
(Start: 6 @7980 has 40 MA's), (8, 8016), (13, 8088), (14, 8115),

Gene: WilliamStrong_12 Start: 8631, Stop: 8936, Start Num: 6
Candidate Starts for WilliamStrong_12:
(Start: 6 @8631 has 40 MA's), (8, 8667), (13, 8739), (14, 8766), (18, 8811),

Gene: Xebius_11 Start: 7651, Stop: 7911, Start Num: 6
Candidate Starts for Xebius_11:
(Start: 6 @7651 has 40 MA's), (12, 7729), (14, 7768), (17, 7801),

Gene: YuuY_12 Start: 7805, Stop: 8095, Start Num: 6
Candidate Starts for YuuY_12:
(3, 7631), (4, 7685), (Start: 6 @7805 has 40 MA's), (9, 7862), (11, 7883), (18, 7985),

Gene: Zayuliv_14 Start: 8023, Stop: 8355, Start Num: 6
Candidate Starts for Zayuliv_14:
(Start: 6 @8023 has 40 MA's), (8, 8059), (13, 8131), (14, 8158),

Gene: Zenitsu_12 Start: 7675, Stop: 7935, Start Num: 6
Candidate Starts for Zenitsu_12:
(Start: 6 @7675 has 40 MA's), (12, 7753), (14, 7792),

Gene: Zepp_15 Start: 8032, Stop: 8364, Start Num: 6
Candidate Starts for Zepp_15:
(Start: 6 @8032 has 40 MA's), (8, 8068), (13, 8140), (14, 8167),