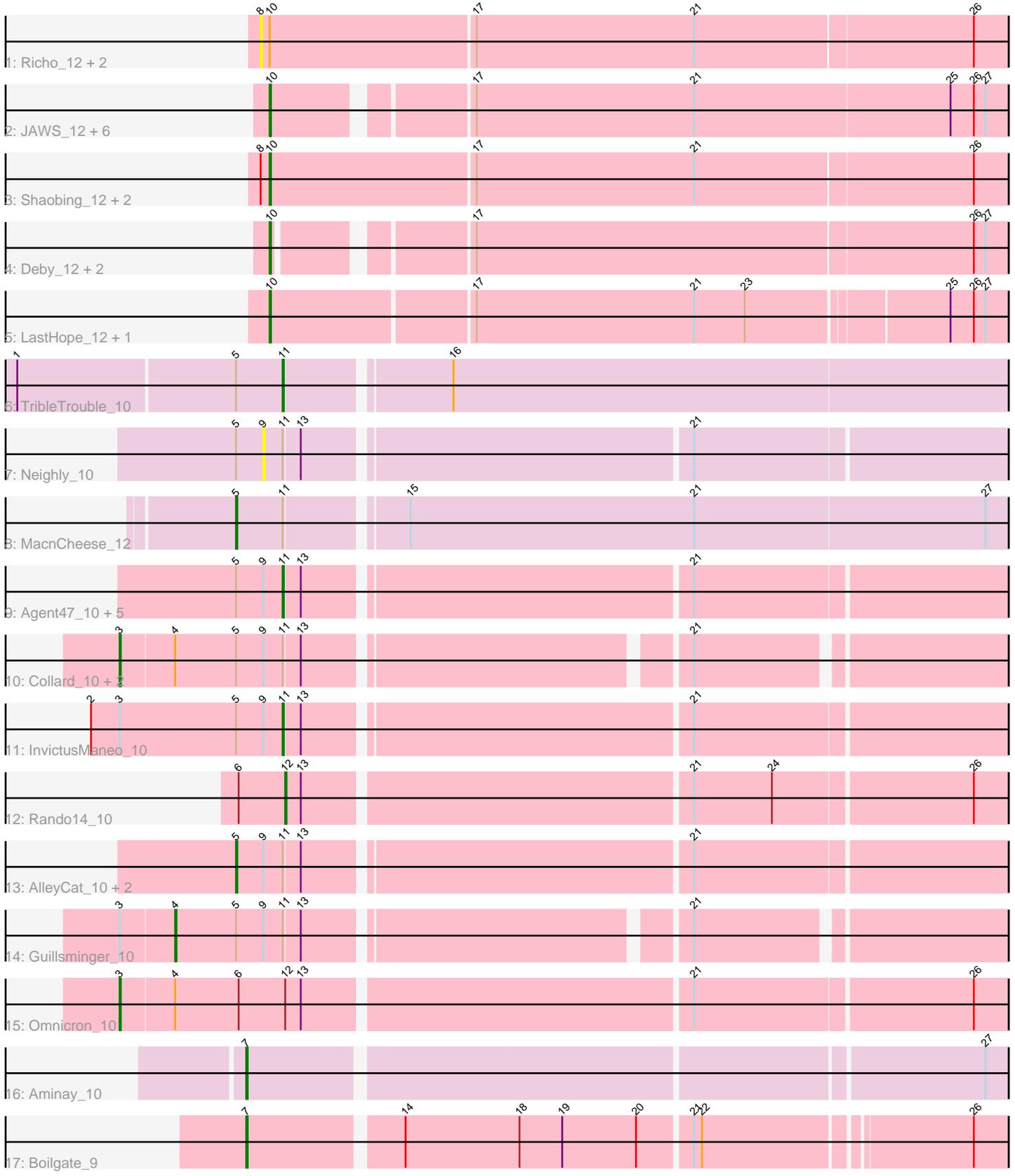# Pham 291330

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 291330 Report

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

Pham number 291330 has 39 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Richo_12, Dartin_12, McMater_12
• Track 2 : JAWS_12, MeaningOfLife_12, Adonis_12, Ganymede_12, Pokerus_11, QuincyRose_11, YoureAdopted_11
• Track 3 : Shaobing_12, Peanam_12, Niklas_12
• Track 4 : Deby_12, Sulley_12, Angelica_12
• Track 5 : LastHope_12, TingHuaYa_12
• Track 6 : TribleTrouble_10
• Track 7 : Neighly_10
• Track 8 : MacnCheese_12
• Track 9 : Agent47_10, Edugator_9, ViviJ_9, LilDirt_9, Psycho_10, Dadosky_10
• Track 10 : Collard_10, Leston_10, Gengar_10
• Track 11 : InvictusManeo_10
• Track 12 : Rando14_10
• Track 13 : AlleyCat_10, Larva_10, Kratio_9
• Track 14 : Guillsminger_10
• Track 15 : Omnicron_10
• Track 16 : Aminay_10
• Track 17 : Boilgate_9

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

The start number called the most often in the published annotations is 10, it was called in 14 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adonis_12, Angelica_12, Deby_12, Ganymede_12, JAWS_12, LastHope_12, MeaningOfLife_12, Niklas_12, Peanam_12, Pokerus_11, QuincyRose_11, Shaobing_12, Sulley_12, TingHuaYa_12, YoureAdopted_11,

Genes that have the "Most Annotated" start but do not call it:
• Dartin_12, McMater_12, Richo_12,

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

• Agent47_10, AlleyCat_10, Aminay_10, Boilgate_9, Collard_10, Dadosky_10, Edugator_9, Gengar_10, Guillsminger_10, InvictusManeo_10, Kratio_9, Larva_10, Leston_10, LilDirt_9, MacnCheese_12, Neighly_10, Omnicron_10, Psycho_10, Rando14_10, TribleTrouble_10, ViviJ_9,

Summary by start number:

Start 3:
• Found in 6 of 39 (15.4%) of genes in pham
• Manual Annotations of this start: 4 of 33
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Collard_10 (K5), Gengar_10 (K5), Leston_10 (K5), Omnicron_10 (K5),

Start 4:
• Found in 5 of 39 (12.8%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Guillsminger_10 (K5),

Start 5:
• Found in 17 of 39 (43.6%) of genes in pham
• Manual Annotations of this start: 4 of 33
• Called 23.5% of time when present
• Phage (with cluster) where this start called: AlleyCat_10 (K5), Kratio_9 (K5), Larva_10 (K5), MacnCheese_12 (K3),

Start 7:
• Found in 2 of 39 (5.1%) of genes in pham
• Manual Annotations of this start: 2 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aminay_10 (K7), Boilgate_9 (K8),

Start 8:
• Found in 6 of 39 (15.4%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Dartin_12 (K1), McMater_12 (K1), Richo_12 (K1),

Start 9:
• Found in 15 of 39 (38.5%) of genes in pham
• No Manual Annotations of this start.
• Called 6.7% of time when present
• Phage (with cluster) where this start called: Neighly_10 (K3),

Start 10:
• Found in 18 of 39 (46.2%) of genes in pham
• Manual Annotations of this start: 14 of 33
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Adonis_12 (K1), Angelica_12 (K1), Deby_12 (K1), Ganymede_12 (K1), JAWS_12 (K1), LastHope_12 (K1), MeaningOfLife_12 (K1), Niklas_12 (K1), Peanam_12 (K1), Pokerus_11 (K1),

QuincyRose_11 (K1), Shaobing_12 (K1), Sulley_12 (K1), TingHuaYa_12 (K1), YoureAdopted_11 (K1),

Start 11:
• Found in 17 of 39 (43.6%) of genes in pham
• Manual Annotations of this start: 7 of 33
• Called 47.1% of time when present
• Phage (with cluster) where this start called: Agent47_10 (K5), Dadosky_10 (K5), Edugator_9 (K5), InvictusManeo_10 (K5), LilDirt_9 (K5), Psycho_10 (K5), TribleTrouble_10 (K3), ViviJ_9 (K5),

Start 12:
• Found in 2 of 39 (5.1%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Rando14_10 (K5),

Summary by clusters:

There are 5 clusters represented in this pham: K3, K1, K8, K7, K5,

Info for manual annotations of cluster K1:
•Start number 10 was manually annotated 14 times for cluster K1.

Info for manual annotations of cluster K3:
•Start number 5 was manually annotated 1 time for cluster K3.
•Start number 11 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K5:
•Start number 3 was manually annotated 4 times for cluster K5.
•Start number 4 was manually annotated 1 time for cluster K5.
•Start number 5 was manually annotated 3 times for cluster K5.
•Start number 11 was manually annotated 6 times for cluster K5.
•Start number 12 was manually annotated 1 time for cluster K5.

Info for manual annotations of cluster K7:
•Start number 7 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:
•Start number 7 was manually annotated 1 time for cluster K8.

Gene Information:
Gene: Adonis_12 Start: 7324, Stop: 7866, Start Num: 10
Candidate Starts for Adonis_12:
(Start: 10 @7324 has 14 MA's), (17, 7459), (21, 7627), (25, 7822), (26, 7840), (27, 7849),

Gene: Agent47_10 Start: 7496, Stop: 8026, Start Num: 11
Candidate Starts for Agent47_10:
(Start: 5 @7460 has 4 MA's), (9, 7481), (Start: 11 @7496 has 7 MA's), (13, 7508), (21, 7793),

Gene: AlleyCat_10 Start: 7355, Stop: 7921, Start Num: 5
Candidate Starts for AlleyCat_10:
(Start: 5 @7355 has 4 MA's), (9, 7376), (Start: 11 @7391 has 7 MA's), (13, 7403), (21, 7688),

Gene: Aminay_10 Start: 7229, Stop: 7786, Start Num: 7
Candidate Starts for Aminay_10:
(Start: 7 @7229 has 2 MA's), (27, 7769),

Gene: Angelica_12 Start: 7293, Stop: 7826, Start Num: 10
Candidate Starts for Angelica_12:
(Start: 10 @7293 has 14 MA's), (17, 7422), (26, 7800), (27, 7809),

Gene: Boilgate_9 Start: 7303, Stop: 7857, Start Num: 7
Candidate Starts for Boilgate_9:
(Start: 7 @7303 has 2 MA's), (14, 7414), (18, 7501), (19, 7534), (20, 7591), (21, 7630), (22, 7636), (26, 7831),

Gene: Collard_10 Start: 7358, Stop: 7987, Start Num: 3
Candidate Starts for Collard_10:
(Start: 3 @7358 has 4 MA's), (Start: 4 @7397 has 1 MA's), (Start: 5 @7442 has 4 MA's), (9, 7463), (Start: 11 @7478 has 7 MA's), (13, 7490), (21, 7763),

Gene: Dadosky_10 Start: 7391, Stop: 7921, Start Num: 11
Candidate Starts for Dadosky_10:
(Start: 5 @7355 has 4 MA's), (9, 7376), (Start: 11 @7391 has 7 MA's), (13, 7403), (21, 7688),

Gene: Dartin_12 Start: 6370, Stop: 6936, Start Num: 8
Candidate Starts for Dartin_12:
(8, 6370), (Start: 10 @6376 has 14 MA's), (17, 6532), (21, 6700), (26, 6910),

Gene: Deby_12 Start: 7293, Stop: 7826, Start Num: 10
Candidate Starts for Deby_12:
(Start: 10 @7293 has 14 MA's), (17, 7422), (26, 7800), (27, 7809),

Gene: Edugator_9 Start: 7391, Stop: 7921, Start Num: 11
Candidate Starts for Edugator_9:
(Start: 5 @7355 has 4 MA's), (9, 7376), (Start: 11 @7391 has 7 MA's), (13, 7403), (21, 7688),

Gene: Ganymede_12 Start: 7333, Stop: 7875, Start Num: 10
Candidate Starts for Ganymede_12:
(Start: 10 @7333 has 14 MA's), (17, 7468), (21, 7636), (25, 7831), (26, 7849), (27, 7858),

Gene: Gengar_10 Start: 7279, Stop: 7908, Start Num: 3
Candidate Starts for Gengar_10:
(Start: 3 @7279 has 4 MA's), (Start: 4 @7318 has 1 MA's), (Start: 5 @7363 has 4 MA's), (9, 7384), (Start: 11 @7399 has 7 MA's), (13, 7411), (21, 7684),

Gene: Guillsminger_10 Start: 7293, Stop: 7883, Start Num: 4
Candidate Starts for Guillsminger_10:
(Start: 3 @7254 has 4 MA's), (Start: 4 @7293 has 1 MA's), (Start: 5 @7338 has 4 MA's), (9, 7359), (Start: 11 @7374 has 7 MA's), (13, 7386), (21, 7659),

Gene: InvictusManeo_10 Start: 7500, Stop: 8030, Start Num: 11

Candidate Starts for InvictusManeo_10:
(2, 7356), (Start: 3 @7377 has 4 MA's), (Start: 5 @7464 has 4 MA's), (9, 7485), (Start: 11 @7500 has 7 MA's), (13, 7512), (21, 7797),

Gene: JAWS_12 Start: 7310, Stop: 7852, Start Num: 10
Candidate Starts for JAWS_12:
(Start: 10 @7310 has 14 MA's), (17, 7445), (21, 7613), (25, 7808), (26, 7826), (27, 7835),

Gene: Kratio_9 Start: 7091, Stop: 7657, Start Num: 5
Candidate Starts for Kratio_9:
(Start: 5 @7091 has 4 MA's), (9, 7112), (Start: 11 @7127 has 7 MA's), (13, 7139), (21, 7424),

Gene: Larva_10 Start: 7222, Stop: 7788, Start Num: 5
Candidate Starts for Larva_10:
(Start: 5 @7222 has 4 MA's), (9, 7243), (Start: 11 @7258 has 7 MA's), (13, 7270), (21, 7555),

Gene: LastHope_12 Start: 6334, Stop: 6882, Start Num: 10
Candidate Starts for LastHope_12:
(Start: 10 @6334 has 14 MA's), (17, 6484), (21, 6652), (23, 6691), (25, 6838), (26, 6856), (27, 6865),

Gene: Leston_10 Start: 7384, Stop: 8013, Start Num: 3
Candidate Starts for Leston_10:
(Start: 3 @7384 has 4 MA's), (Start: 4 @7423 has 1 MA's), (Start: 5 @7468 has 4 MA's), (9, 7489), (Start: 11 @7504 has 7 MA's), (13, 7516), (21, 7789),

Gene: LilDirt_9 Start: 7257, Stop: 7787, Start Num: 11
Candidate Starts for LilDirt_9:
(Start: 5 @7221 has 4 MA's), (9, 7242), (Start: 11 @7257 has 7 MA's), (13, 7269), (21, 7554),

Gene: MacnCheese_12 Start: 7513, Stop: 8091, Start Num: 5
Candidate Starts for MacnCheese_12:
(Start: 5 @7513 has 4 MA's), (Start: 11 @7549 has 7 MA's), (15, 7633), (21, 7852), (27, 8074),

Gene: McMater_12 Start: 6370, Stop: 6936, Start Num: 8
Candidate Starts for McMater_12:
(8, 6370), (Start: 10 @6376 has 14 MA's), (17, 6532), (21, 6700), (26, 6910),

Gene: MeaningOfLife_12 Start: 7286, Stop: 7828, Start Num: 10
Candidate Starts for MeaningOfLife_12:
(Start: 10 @7286 has 14 MA's), (17, 7421), (21, 7589), (25, 7784), (26, 7802), (27, 7811),

Gene: Neighly_10 Start: 7242, Stop: 7787, Start Num: 9
Candidate Starts for Neighly_10:
(Start: 5 @7221 has 4 MA's), (9, 7242), (Start: 11 @7257 has 7 MA's), (13, 7269), (21, 7554),

Gene: Niklas_12 Start: 6376, Stop: 6936, Start Num: 10
Candidate Starts for Niklas_12:
(8, 6370), (Start: 10 @6376 has 14 MA's), (17, 6532), (21, 6700), (26, 6910),

Gene: Omnicron_10 Start: 6242, Stop: 6898, Start Num: 3
Candidate Starts for Omnicron_10:
(Start: 3 @6242 has 4 MA's), (Start: 4 @6281 has 1 MA's), (6, 6329), (Start: 12 @6365 has 1 MA's), (13, 6377), (21, 6665), (26, 6872),

Gene: Peanam_12 Start: 6376, Stop: 6936, Start Num: 10
Candidate Starts for Peanam_12:
(8, 6370), (Start: 10 @6376 has 14 MA's), (17, 6532), (21, 6700), (26, 6910),

Gene: Pokerus_11 Start: 7270, Stop: 7812, Start Num: 10
Candidate Starts for Pokerus_11:
(Start: 10 @7270 has 14 MA's), (17, 7405), (21, 7573), (25, 7768), (26, 7786), (27, 7795),

Gene: Psycho_10 Start: 7388, Stop: 7918, Start Num: 11
Candidate Starts for Psycho_10:
(Start: 5 @7352 has 4 MA's), (9, 7373), (Start: 11 @7388 has 7 MA's), (13, 7400), (21, 7685),

Gene: QuincyRose_11 Start: 7333, Stop: 7875, Start Num: 10
Candidate Starts for QuincyRose_11:
(Start: 10 @7333 has 14 MA's), (17, 7468), (21, 7636), (25, 7831), (26, 7849), (27, 7858),

Gene: Rando14_10 Start: 6393, Stop: 6926, Start Num: 12
Candidate Starts for Rando14_10:
(6, 6357), (Start: 12 @6393 has 1 MA's), (13, 6405), (21, 6693), (24, 6753), (26, 6900),

Gene: Richo_12 Start: 6370, Stop: 6936, Start Num: 8
Candidate Starts for Richo_12:
(8, 6370), (Start: 10 @6376 has 14 MA's), (17, 6532), (21, 6700), (26, 6910),

Gene: Shaobing_12 Start: 6376, Stop: 6936, Start Num: 10
Candidate Starts for Shaobing_12:
(8, 6370), (Start: 10 @6376 has 14 MA's), (17, 6532), (21, 6700), (26, 6910),

Gene: Sulley_12 Start: 7292, Stop: 7825, Start Num: 10
Candidate Starts for Sulley_12:
(Start: 10 @7292 has 14 MA's), (17, 7421), (26, 7799), (27, 7808),

Gene: TingHuaYa_12 Start: 6338, Stop: 6886, Start Num: 10
Candidate Starts for TingHuaYa_12:
(Start: 10 @6338 has 14 MA's), (17, 6488), (21, 6656), (23, 6695), (25, 6842), (26, 6860), (27, 6869),

Gene: TribleTrouble_10 Start: 7121, Stop: 7663, Start Num: 11
Candidate Starts for TribleTrouble_10:
(1, 6923), (Start: 5 @7085 has 4 MA's), (Start: 11 @7121 has 7 MA's), (16, 7238),

Gene: ViviJ_9 Start: 7257, Stop: 7787, Start Num: 11
Candidate Starts for ViviJ_9:
(Start: 5 @7221 has 4 MA's), (9, 7242), (Start: 11 @7257 has 7 MA's), (13, 7269), (21, 7554),

Gene: YoureAdopted_11 Start: 7286, Stop: 7828, Start Num: 10
Candidate Starts for YoureAdopted_11:
(Start: 10 @7286 has 14 MA's), (17, 7421), (21, 7589), (25, 7784), (26, 7802), (27, 7811),