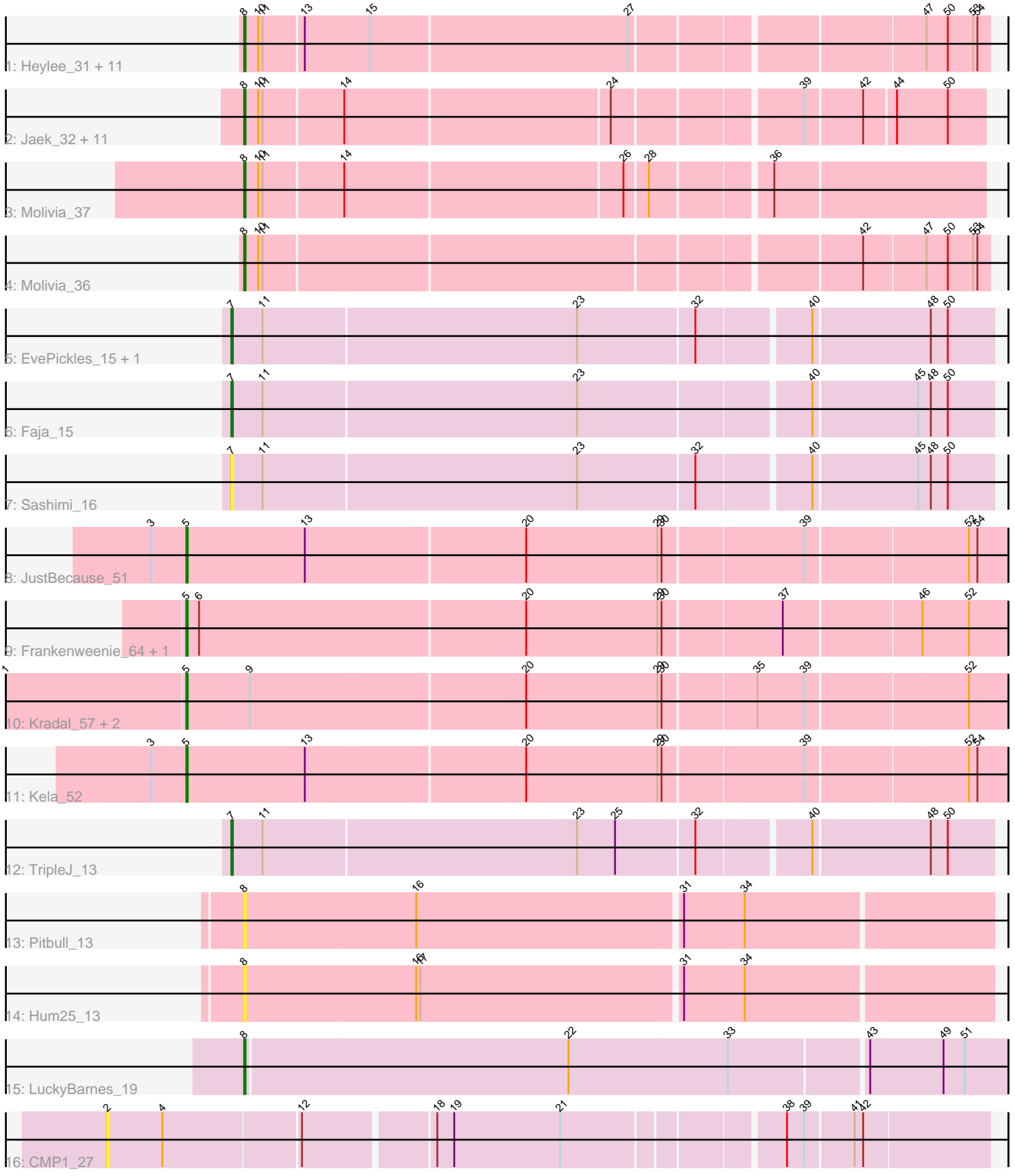


Pham 156491



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 156491 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156491 has 42 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Heylee_31, Gorgeous_32, Boersma_33, Thunderclap_32, Ichor_31, Anansi_32, SorJuana_32, Yeezus_31, Jaek_31, Amigo_32, Amavida_31, Rings_31
- Track 2 : Jaek_32, Gorgeous_33, Heylee_32, Thunderclap_33, Anansi_33, Ichor_32, SorJuana_33, Yeezus_32, Amigo_33, Boersma_34, Rings_32, Amavida_32
- Track 3 : Molivia_37
- Track 4 : Molivia_36
- Track 5 : EvePickles_15, Kukla_13
- Track 6 : Faja_15
- Track 7 : Sashimi_16
- Track 8 : JustBecause_51
- Track 9 : Frankenweenie_64, Nirvana_62
- Track 10 : Kradal_57, EhyElimayoE_57, Satis_57
- Track 11 : Kela_52
- Track 12 : TripleJ_13
- Track 13 : Pitbull_13
- Track 14 : Hum25_13
- Track 15 : LuckyBarnes_19
- Track 16 : CMP1_27

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

The start number called the most often in the published annotations is 8, it was called in 23 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amavida_31, Amavida_32, Amigo_32, Amigo_33, Anansi_32, Anansi_33, Boersma_33, Boersma_34, Gorgeous_32, Gorgeous_33, Heylee_31, Heylee_32, Hum25_13, Ichor_31, Ichor_32, Jaek_31, Jaek_32, LuckyBarnes_19, Molivia_36, Molivia_37, Pitbull_13, Rings_31, Rings_32, SorJuana_32, SorJuana_33, Thunderclap_32, Thunderclap_33, Yeezus_31, Yeezus_32,

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

-

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

• CMP1_27, EhyElimayoE_57, EvePickles_15, Faja_15, Frankenweenie_64, JustBecause_51, Kela_52, Kradal_57, Kukla_13, Nirvana_62, Sashimi_16, Satis_57, TripleJ_13,

Summary by start number:

Start 2:

- Found in 1 of 42 (2.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CMP1_27 (singleton),

Start 5:

- Found in 7 of 42 (16.7%) of genes in pham
- Manual Annotations of this start: 6 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_57 (BM), Frankenweenie_64 (BM), JustBecause_51 (BM), Kela_52 (BM), Kradal_57 (BM), Nirvana_62 (BM), Satis_57 (BM),

Start 7:

- Found in 5 of 42 (11.9%) of genes in pham
- Manual Annotations of this start: 3 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EvePickles_15 (AY), Faja_15 (AY), Kukla_13 (FJ), Sashimi_16 (AY), TripleJ_13 (FJ),

Start 8:

- Found in 29 of 42 (69.0%) of genes in pham
- Manual Annotations of this start: 23 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amavida_31 (AQ), Amavida_32 (AQ), Amigo_32 (AQ), Amigo_33 (AQ), Anansi_32 (AQ), Anansi_33 (AQ), Boersma_33 (AQ), Boersma_34 (AQ), Gorgeous_32 (AQ), Gorgeous_33 (AQ), Heylee_31 (AQ), Heylee_32 (AQ), Hum25_13 (FQ), Ichor_31 (AQ), Ichor_32 (AQ), Jaek_31 (AQ), Jaek_32 (AQ), LuckyBarnes_19 (singleton), Molivia_36 (AQ), Molivia_37 (AQ), Pitbull_13 (FQ), Rings_31 (AQ), Rings_32 (AQ), SorJuana_32 (AQ), SorJuana_33 (AQ), Thunderclap_32 (AQ), Thunderclap_33 (AQ), Yeezus_31 (AQ), Yeezus_32 (AQ),

Summary by clusters:

There are 6 clusters represented in this pham: FQ, singleton, BM, AQ, AY, FJ,

Info for manual annotations of cluster AQ:

- Start number 8 was manually annotated 22 times for cluster AQ.

Info for manual annotations of cluster AY:

- Start number 7 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster BM:

- Start number 5 was manually annotated 6 times for cluster BM.

Info for manual annotations of cluster FJ:

- Start number 7 was manually annotated 1 time for cluster FJ.

Gene Information:

Gene: Amavida_31 Start: 16804, Stop: 17304, Start Num: 8

Candidate Starts for Amavida_31:

(Start: 8 @16804 has 23 MA's), (10, 16813), (11, 16816), (13, 16843), (15, 16888), (27, 17068), (47, 17260), (50, 17275), (53, 17293), (54, 17296),

Gene: Amavida_32 Start: 17306, Stop: 17800, Start Num: 8

Candidate Starts for Amavida_32:

(Start: 8 @17306 has 23 MA's), (10, 17315), (11, 17318), (14, 17372), (24, 17555), (39, 17678), (42, 17717), (44, 17738), (50, 17774),

Gene: Amigo_33 Start: 17180, Stop: 17674, Start Num: 8

Candidate Starts for Amigo_33:

(Start: 8 @17180 has 23 MA's), (10, 17189), (11, 17192), (14, 17246), (24, 17429), (39, 17552), (42, 17591), (44, 17612), (50, 17648),

Gene: Amigo_32 Start: 16678, Stop: 17178, Start Num: 8

Candidate Starts for Amigo_32:

(Start: 8 @16678 has 23 MA's), (10, 16687), (11, 16690), (13, 16717), (15, 16762), (27, 16942), (47, 17134), (50, 17149), (53, 17167), (54, 17170),

Gene: Anansi_33 Start: 17189, Stop: 17683, Start Num: 8

Candidate Starts for Anansi_33:

(Start: 8 @17189 has 23 MA's), (10, 17198), (11, 17201), (14, 17255), (24, 17438), (39, 17561), (42, 17600), (44, 17621), (50, 17657),

Gene: Anansi_32 Start: 16687, Stop: 17187, Start Num: 8

Candidate Starts for Anansi_32:

(Start: 8 @16687 has 23 MA's), (10, 16696), (11, 16699), (13, 16726), (15, 16771), (27, 16951), (47, 17143), (50, 17158), (53, 17176), (54, 17179),

Gene: Boersma_33 Start: 16678, Stop: 17178, Start Num: 8

Candidate Starts for Boersma_33:

(Start: 8 @16678 has 23 MA's), (10, 16687), (11, 16690), (13, 16717), (15, 16762), (27, 16942), (47, 17134), (50, 17149), (53, 17167), (54, 17170),

Gene: Boersma_34 Start: 17180, Stop: 17674, Start Num: 8

Candidate Starts for Boersma_34:

(Start: 8 @17180 has 23 MA's), (10, 17189), (11, 17192), (14, 17246), (24, 17429), (39, 17552), (42, 17591), (44, 17612), (50, 17648),

Gene: CMP1_27 Start: 22546, Stop: 23133, Start Num: 2

Candidate Starts for CMP1_27:

(2, 22546), (4, 22585), (12, 22678), (18, 22765), (19, 22777), (21, 22852), (38, 22996), (39, 23008), (41, 23041), (42, 23047),

Gene: EhyElimayoE_57 Start: 31705, Stop: 32271, Start Num: 5

Candidate Starts for EhyElimayoE_57:

(1, 31579), (Start: 5 @31705 has 6 MA's), (9, 31750), (20, 31942), (29, 32035), (30, 32038), (35, 32101), (39, 32134), (52, 32245),

Gene: EvePickles_15 Start: 9172, Stop: 9693, Start Num: 7

Candidate Starts for EvePickles_15:

(Start: 7 @9172 has 3 MA's), (11, 9193), (23, 9412), (32, 9493), (40, 9568), (48, 9649), (50, 9661),

Gene: Faja_15 Start: 9116, Stop: 9637, Start Num: 7

Candidate Starts for Faja_15:

(Start: 7 @9116 has 3 MA's), (11, 9137), (23, 9356), (40, 9512), (45, 9584), (48, 9593), (50, 9605),

Gene: Frankenweenie_64 Start: 34296, Stop: 34862, Start Num: 5

Candidate Starts for Frankenweenie_64:

(Start: 5 @34296 has 6 MA's), (6, 34305), (20, 34533), (29, 34626), (30, 34629), (37, 34710), (46, 34803), (52, 34836),

Gene: Gorgeous_32 Start: 16687, Stop: 17187, Start Num: 8

Candidate Starts for Gorgeous_32:

(Start: 8 @16687 has 23 MA's), (10, 16696), (11, 16699), (13, 16726), (15, 16771), (27, 16951), (47, 17143), (50, 17158), (53, 17176), (54, 17179),

Gene: Gorgeous_33 Start: 17189, Stop: 17683, Start Num: 8

Candidate Starts for Gorgeous_33:

(Start: 8 @17189 has 23 MA's), (10, 17198), (11, 17201), (14, 17255), (24, 17438), (39, 17561), (42, 17600), (44, 17621), (50, 17657),

Gene: Heylee_31 Start: 16804, Stop: 17304, Start Num: 8

Candidate Starts for Heylee_31:

(Start: 8 @16804 has 23 MA's), (10, 16813), (11, 16816), (13, 16843), (15, 16888), (27, 17068), (47, 17260), (50, 17275), (53, 17293), (54, 17296),

Gene: Heylee_32 Start: 17306, Stop: 17800, Start Num: 8

Candidate Starts for Heylee_32:

(Start: 8 @17306 has 23 MA's), (10, 17315), (11, 17318), (14, 17372), (24, 17555), (39, 17678), (42, 17717), (44, 17738), (50, 17774),

Gene: Hum25_13 Start: 7904, Stop: 8419, Start Num: 8

Candidate Starts for Hum25_13:

(Start: 8 @7904 has 23 MA's), (16, 8024), (17, 8027), (31, 8207), (34, 8249),

Gene: Ichor_31 Start: 16678, Stop: 17178, Start Num: 8

Candidate Starts for Ichor_31:

(Start: 8 @16678 has 23 MA's), (10, 16687), (11, 16690), (13, 16717), (15, 16762), (27, 16942), (47, 17134), (50, 17149), (53, 17167), (54, 17170),

Gene: Ichor_32 Start: 17180, Stop: 17674, Start Num: 8

Candidate Starts for Ichor_32:

(Start: 8 @17180 has 23 MA's), (10, 17189), (11, 17192), (14, 17246), (24, 17429), (39, 17552), (42, 17591), (44, 17612), (50, 17648),

Gene: Jaek_32 Start: 17180, Stop: 17674, Start Num: 8

Candidate Starts for Jaek_32:

(Start: 8 @17180 has 23 MA's), (10, 17189), (11, 17192), (14, 17246), (24, 17429), (39, 17552), (42, 17591), (44, 17612), (50, 17648),

Gene: Jaek_31 Start: 16678, Stop: 17178, Start Num: 8

Candidate Starts for Jaek_31:

(Start: 8 @16678 has 23 MA's), (10, 16687), (11, 16690), (13, 16717), (15, 16762), (27, 16942), (47, 17134), (50, 17149), (53, 17167), (54, 17170),

Gene: JustBecause_51 Start: 28928, Stop: 29494, Start Num: 5

Candidate Starts for JustBecause_51:

(3, 28904), (Start: 5 @28928 has 6 MA's), (13, 29012), (20, 29165), (29, 29258), (30, 29261), (39, 29357), (52, 29468), (54, 29474),

Gene: Kela_52 Start: 28793, Stop: 29359, Start Num: 5

Candidate Starts for Kela_52:

(3, 28769), (Start: 5 @28793 has 6 MA's), (13, 28877), (20, 29030), (29, 29123), (30, 29126), (39, 29222), (52, 29333), (54, 29339),

Gene: Kradal_57 Start: 31705, Stop: 32271, Start Num: 5

Candidate Starts for Kradal_57:

(1, 31579), (Start: 5 @31705 has 6 MA's), (9, 31750), (20, 31942), (29, 32035), (30, 32038), (35, 32101), (39, 32134), (52, 32245),

Gene: Kukla_13 Start: 8634, Stop: 9155, Start Num: 7

Candidate Starts for Kukla_13:

(Start: 7 @8634 has 3 MA's), (11, 8655), (23, 8874), (32, 8955), (40, 9030), (48, 9111), (50, 9123),

Gene: LuckyBarnes_19 Start: 11489, Stop: 12013, Start Num: 8

Candidate Starts for LuckyBarnes_19:

(Start: 8 @11489 has 23 MA's), (22, 11714), (33, 11825), (43, 11918), (49, 11969), (51, 11984),

Gene: Molivia_37 Start: 17428, Stop: 17925, Start Num: 8

Candidate Starts for Molivia_37:

(Start: 8 @17428 has 23 MA's), (10, 17437), (11, 17440), (14, 17494), (26, 17686), (28, 17701), (36, 17779),

Gene: Molivia_36 Start: 16925, Stop: 17425, Start Num: 8

Candidate Starts for Molivia_36:

(Start: 8 @16925 has 23 MA's), (10, 16934), (11, 16937), (42, 17339), (47, 17381), (50, 17396), (53, 17414), (54, 17417),

Gene: Nirvana_62 Start: 33669, Stop: 34235, Start Num: 5

Candidate Starts for Nirvana_62:

(Start: 5 @33669 has 6 MA's), (6, 33678), (20, 33906), (29, 33999), (30, 34002), (37, 34083), (46, 34176), (52, 34209),

Gene: Pitbull_13 Start: 7534, Stop: 8049, Start Num: 8

Candidate Starts for Pitbull_13:

(Start: 8 @7534 has 23 MA's), (16, 7654), (31, 7837), (34, 7879),

Gene: Rings_32 Start: 17311, Stop: 17805, Start Num: 8

Candidate Starts for Rings_32:

(Start: 8 @17311 has 23 MA's), (10, 17320), (11, 17323), (14, 17377), (24, 17560), (39, 17683), (42, 17722), (44, 17743), (50, 17779),

Gene: Rings_31 Start: 16809, Stop: 17309, Start Num: 8

Candidate Starts for Rings_31:

(Start: 8 @16809 has 23 MA's), (10, 16818), (11, 16821), (13, 16848), (15, 16893), (27, 17073), (47, 17265), (50, 17280), (53, 17298), (54, 17301),

Gene: Sashimi_16 Start: 9234, Stop: 9755, Start Num: 7

Candidate Starts for Sashimi_16:

(Start: 7 @9234 has 3 MA's), (11, 9255), (23, 9474), (32, 9555), (40, 9630), (45, 9702), (48, 9711), (50, 9723),

Gene: Satis_57 Start: 31701, Stop: 32267, Start Num: 5

Candidate Starts for Satis_57:

(1, 31575), (Start: 5 @31701 has 6 MA's), (9, 31746), (20, 31938), (29, 32031), (30, 32034), (35, 32097), (39, 32130), (52, 32241),

Gene: SorJuana_33 Start: 17189, Stop: 17683, Start Num: 8

Candidate Starts for SorJuana_33:

(Start: 8 @17189 has 23 MA's), (10, 17198), (11, 17201), (14, 17255), (24, 17438), (39, 17561), (42, 17600), (44, 17621), (50, 17657),

Gene: SorJuana_32 Start: 16687, Stop: 17187, Start Num: 8

Candidate Starts for SorJuana_32:

(Start: 8 @16687 has 23 MA's), (10, 16696), (11, 16699), (13, 16726), (15, 16771), (27, 16951), (47, 17143), (50, 17158), (53, 17176), (54, 17179),

Gene: Thunderclap_32 Start: 16707, Stop: 17207, Start Num: 8

Candidate Starts for Thunderclap_32:

(Start: 8 @16707 has 23 MA's), (10, 16716), (11, 16719), (13, 16746), (15, 16791), (27, 16971), (47, 17163), (50, 17178), (53, 17196), (54, 17199),

Gene: Thunderclap_33 Start: 17209, Stop: 17703, Start Num: 8

Candidate Starts for Thunderclap_33:

(Start: 8 @17209 has 23 MA's), (10, 17218), (11, 17221), (14, 17275), (24, 17458), (39, 17581), (42, 17620), (44, 17641), (50, 17677),

Gene: TripleJ_13 Start: 8929, Stop: 9450, Start Num: 7

Candidate Starts for TripleJ_13:

(Start: 7 @8929 has 3 MA's), (11, 8950), (23, 9169), (25, 9196), (32, 9250), (40, 9325), (48, 9406), (50, 9418),

Gene: Yeezus_31 Start: 16677, Stop: 17177, Start Num: 8

Candidate Starts for Yeezus_31:

(Start: 8 @16677 has 23 MA's), (10, 16686), (11, 16689), (13, 16716), (15, 16761), (27, 16941), (47, 17133), (50, 17148), (53, 17166), (54, 17169),

Gene: Yeezus_32 Start: 17179, Stop: 17673, Start Num: 8

Candidate Starts for Yeezus_32:

(Start: 8 @17179 has 23 MA's), (10, 17188), (11, 17191), (14, 17245), (24, 17428), (39, 17551), (42, 17590), (44, 17611), (50, 17647),