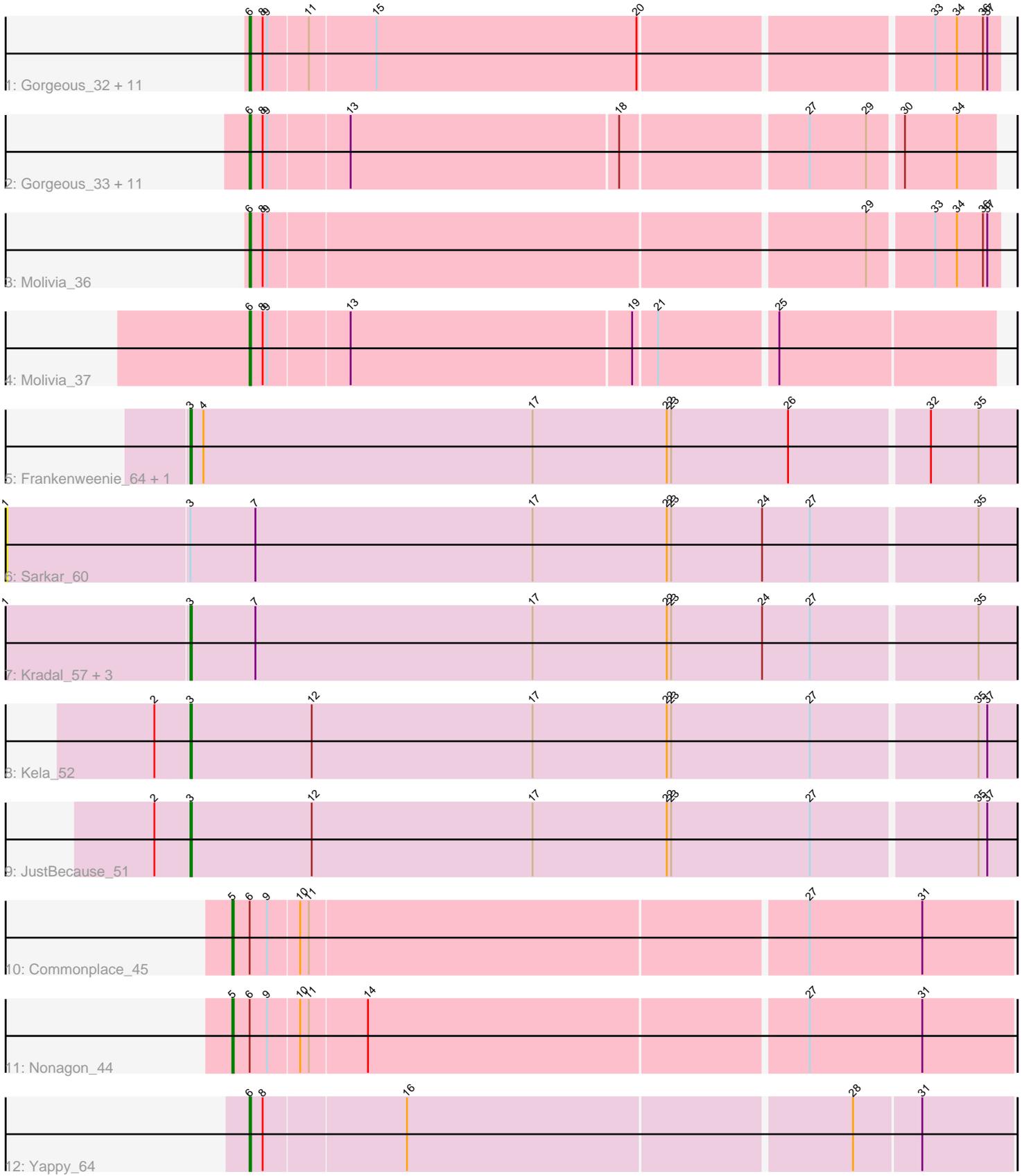


Pham 291340



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 291340 Report

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

Pham number 291340 has 38 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Gorgeous_32, Thunderclap_32, Ichor_31, Amavida_35, SorJuana_32, Heylee_35, Yeezus_31, Jaek_31, Boersma_33, Amigo_32, Rings_31, Anansi_32
- Track 2 : Gorgeous_33, Thunderclap_33, Anansi_33, Amavida_36, Jaek_32, Ichor_32, SorJuana_33, Heylee_36, Yeezus_32, Amigo_33, Boersma_34, Rings_32
- Track 3 : Molivia_36
- Track 4 : Molivia_37
- Track 5 : Frankenweenie_64, Nirvana_61
- Track 6 : Sarkar_60
- Track 7 : Kradal_57, Quantum_56, EhyElimayoE_57, Satis_57
- Track 8 : Kela_52
- Track 9 : JustBecause_51
- Track 10 : Commonplace_45
- Track 11 : Nonagon_44
- Track 12 : Yappy_64

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 27 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amavida_35, Amavida_36, Amigo_32, Amigo_33, Anansi_32, Anansi_33, Boersma_33, Boersma_34, Gorgeous_32, Gorgeous_33, Heylee_35, Heylee_36, Ichor_31, Ichor_32, Jaek_31, Jaek_32, Molivia_36, Molivia_37, Rings_31, Rings_32, SorJuana_32, SorJuana_33, Thunderclap_32, Thunderclap_33, Yappy_64, Yeezus_31, Yeezus_32,

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

- Commonplace_45, Nonagon_44,

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

- EhyElimayoE_57, Frankenweenie_64, JustBecause_51, Kela_52, Kradal_57, Nirvana_61, Quantum_56, Sarkar_60, Satis_57,

Summary by start number:

Start 1:

- Found in 5 of 38 (13.2%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Sarkar_60 (BM),

Start 3:

- Found in 9 of 38 (23.7%) of genes in pham
- Manual Annotations of this start: 8 of 37
- Called 88.9% 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_61 (BM), Quantum_56 (BM), Satis_57 (BM),

Start 5:

- Found in 2 of 38 (5.3%) of genes in pham
- Manual Annotations of this start: 2 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Commonplace_45 (JD), Nonagon_44 (JD),

Start 6:

- Found in 29 of 38 (76.3%) of genes in pham
- Manual Annotations of this start: 27 of 37
- Called 93.1% of time when present
- Phage (with cluster) where this start called: Amavida_35 (AQ), Amavida_36 (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_35 (AQ), Heylee_36 (AQ), Ichor_31 (AQ), Ichor_32 (AQ), Jaek_31 (AQ), Jaek_32 (AQ), Molivia_36 (AQ), Molivia_37 (AQ), Rings_31 (AQ), Rings_32 (AQ), SorJuana_32 (AQ), SorJuana_33 (AQ), Thunderclap_32 (AQ), Thunderclap_33 (AQ), Yappy_64 (singleton), Yeezus_31 (AQ), Yeezus_32 (AQ),

Summary by clusters:

There are 4 clusters represented in this pham: AQ, BM, singleton, JD,

Info for manual annotations of cluster AQ:

- Start number 6 was manually annotated 26 times for cluster AQ.

Info for manual annotations of cluster BM:

- Start number 3 was manually annotated 8 times for cluster BM.

Info for manual annotations of cluster JD:

- Start number 5 was manually annotated 2 times for cluster JD.

Gene Information:

Gene: Amavida_35 Start: 16804, Stop: 17304, Start Num: 6

Candidate Starts for Amavida_35:

(Start: 6 @16804 has 27 MA's), (8, 16813), (9, 16816), (11, 16843), (15, 16888), (20, 17068), (33, 17260), (34, 17275), (36, 17293), (37, 17296),

Gene: Amavida_36 Start: 17306, Stop: 17800, Start Num: 6

Candidate Starts for Amavida_36:

(Start: 6 @17306 has 27 MA's), (8, 17315), (9, 17318), (13, 17372), (18, 17555), (27, 17678), (29, 17717), (30, 17738), (34, 17774),

Gene: Amigo_33 Start: 17180, Stop: 17674, Start Num: 6

Candidate Starts for Amigo_33:

(Start: 6 @17180 has 27 MA's), (8, 17189), (9, 17192), (13, 17246), (18, 17429), (27, 17552), (29, 17591), (30, 17612), (34, 17648),

Gene: Amigo_32 Start: 16678, Stop: 17178, Start Num: 6

Candidate Starts for Amigo_32:

(Start: 6 @16678 has 27 MA's), (8, 16687), (9, 16690), (11, 16717), (15, 16762), (20, 16942), (33, 17134), (34, 17149), (36, 17167), (37, 17170),

Gene: Anansi_33 Start: 17189, Stop: 17683, Start Num: 6

Candidate Starts for Anansi_33:

(Start: 6 @17189 has 27 MA's), (8, 17198), (9, 17201), (13, 17255), (18, 17438), (27, 17561), (29, 17600), (30, 17621), (34, 17657),

Gene: Anansi_32 Start: 16687, Stop: 17187, Start Num: 6

Candidate Starts for Anansi_32:

(Start: 6 @16687 has 27 MA's), (8, 16696), (9, 16699), (11, 16726), (15, 16771), (20, 16951), (33, 17143), (34, 17158), (36, 17176), (37, 17179),

Gene: Boersma_34 Start: 17180, Stop: 17674, Start Num: 6

Candidate Starts for Boersma_34:

(Start: 6 @17180 has 27 MA's), (8, 17189), (9, 17192), (13, 17246), (18, 17429), (27, 17552), (29, 17591), (30, 17612), (34, 17648),

Gene: Boersma_33 Start: 16678, Stop: 17178, Start Num: 6

Candidate Starts for Boersma_33:

(Start: 6 @16678 has 27 MA's), (8, 16687), (9, 16690), (11, 16717), (15, 16762), (20, 16942), (33, 17134), (34, 17149), (36, 17167), (37, 17170),

Gene: Commonplace_45 Start: 24824, Stop: 25351, Start Num: 5

Candidate Starts for Commonplace_45:

(Start: 5 @24824 has 2 MA's), (Start: 6 @24836 has 27 MA's), (9, 24848), (10, 24869), (11, 24875), (27, 25211), (31, 25289),

Gene: EhyElimayoE_57 Start: 31705, Stop: 32271, Start Num: 3

Candidate Starts for EhyElimayoE_57:

(1, 31579), (Start: 3 @31705 has 8 MA's), (7, 31750), (17, 31942), (22, 32035), (23, 32038), (24, 32101), (27, 32134), (35, 32245),

Gene: Frankenweenie_64 Start: 34296, Stop: 34862, Start Num: 3

Candidate Starts for Frankenweenie_64:

(Start: 3 @34296 has 8 MA's), (4, 34305), (17, 34533), (22, 34626), (23, 34629), (26, 34710), (32, 34803), (35, 34836),

Gene: Gorgeous_32 Start: 16687, Stop: 17187, Start Num: 6

Candidate Starts for Gorgeous_32:

(Start: 6 @16687 has 27 MA's), (8, 16696), (9, 16699), (11, 16726), (15, 16771), (20, 16951), (33, 17143), (34, 17158), (36, 17176), (37, 17179),

Gene: Gorgeous_33 Start: 17189, Stop: 17683, Start Num: 6

Candidate Starts for Gorgeous_33:

(Start: 6 @17189 has 27 MA's), (8, 17198), (9, 17201), (13, 17255), (18, 17438), (27, 17561), (29, 17600), (30, 17621), (34, 17657),

Gene: Heylee_35 Start: 16804, Stop: 17304, Start Num: 6

Candidate Starts for Heylee_35:

(Start: 6 @16804 has 27 MA's), (8, 16813), (9, 16816), (11, 16843), (15, 16888), (20, 17068), (33, 17260), (34, 17275), (36, 17293), (37, 17296),

Gene: Heylee_36 Start: 17306, Stop: 17800, Start Num: 6

Candidate Starts for Heylee_36:

(Start: 6 @17306 has 27 MA's), (8, 17315), (9, 17318), (13, 17372), (18, 17555), (27, 17678), (29, 17717), (30, 17738), (34, 17774),

Gene: Ichor_31 Start: 16678, Stop: 17178, Start Num: 6

Candidate Starts for Ichor_31:

(Start: 6 @16678 has 27 MA's), (8, 16687), (9, 16690), (11, 16717), (15, 16762), (20, 16942), (33, 17134), (34, 17149), (36, 17167), (37, 17170),

Gene: Ichor_32 Start: 17180, Stop: 17674, Start Num: 6

Candidate Starts for Ichor_32:

(Start: 6 @17180 has 27 MA's), (8, 17189), (9, 17192), (13, 17246), (18, 17429), (27, 17552), (29, 17591), (30, 17612), (34, 17648),

Gene: Jaek_32 Start: 17180, Stop: 17674, Start Num: 6

Candidate Starts for Jaek_32:

(Start: 6 @17180 has 27 MA's), (8, 17189), (9, 17192), (13, 17246), (18, 17429), (27, 17552), (29, 17591), (30, 17612), (34, 17648),

Gene: Jaek_31 Start: 16678, Stop: 17178, Start Num: 6

Candidate Starts for Jaek_31:

(Start: 6 @16678 has 27 MA's), (8, 16687), (9, 16690), (11, 16717), (15, 16762), (20, 16942), (33, 17134), (34, 17149), (36, 17167), (37, 17170),

Gene: JustBecause_51 Start: 28928, Stop: 29494, Start Num: 3

Candidate Starts for JustBecause_51:

(2, 28904), (Start: 3 @28928 has 8 MA's), (12, 29012), (17, 29165), (22, 29258), (23, 29261), (27, 29357), (35, 29468), (37, 29474),

Gene: Kela_52 Start: 28793, Stop: 29359, Start Num: 3

Candidate Starts for Kela_52:

(2, 28769), (Start: 3 @28793 has 8 MA's), (12, 28877), (17, 29030), (22, 29123), (23, 29126), (27, 29222), (35, 29333), (37, 29339),

Gene: Kradal_57 Start: 31705, Stop: 32271, Start Num: 3

Candidate Starts for Kradal_57:

(1, 31579), (Start: 3 @31705 has 8 MA's), (7, 31750), (17, 31942), (22, 32035), (23, 32038), (24, 32101), (27, 32134), (35, 32245),

Gene: Molivia_36 Start: 16925, Stop: 17425, Start Num: 6

Candidate Starts for Molivia_36:

(Start: 6 @16925 has 27 MA's), (8, 16934), (9, 16937), (29, 17339), (33, 17381), (34, 17396), (36, 17414), (37, 17417),

Gene: Molivia_37 Start: 17428, Stop: 17925, Start Num: 6

Candidate Starts for Molivia_37:

(Start: 6 @17428 has 27 MA's), (8, 17437), (9, 17440), (13, 17494), (19, 17686), (21, 17701), (25, 17779),

Gene: Nirvana_61 Start: 33669, Stop: 34235, Start Num: 3

Candidate Starts for Nirvana_61:

(Start: 3 @33669 has 8 MA's), (4, 33678), (17, 33906), (22, 33999), (23, 34002), (26, 34083), (32, 34176), (35, 34209),

Gene: Nonagon_44 Start: 24524, Stop: 25051, Start Num: 5

Candidate Starts for Nonagon_44:

(Start: 5 @24524 has 2 MA's), (Start: 6 @24536 has 27 MA's), (9, 24548), (10, 24569), (11, 24575), (14, 24614), (27, 24911), (31, 24989),

Gene: Quantum_56 Start: 31705, Stop: 32271, Start Num: 3

Candidate Starts for Quantum_56:

(1, 31579), (Start: 3 @31705 has 8 MA's), (7, 31750), (17, 31942), (22, 32035), (23, 32038), (24, 32101), (27, 32134), (35, 32245),

Gene: Rings_32 Start: 17311, Stop: 17805, Start Num: 6

Candidate Starts for Rings_32:

(Start: 6 @17311 has 27 MA's), (8, 17320), (9, 17323), (13, 17377), (18, 17560), (27, 17683), (29, 17722), (30, 17743), (34, 17779),

Gene: Rings_31 Start: 16809, Stop: 17309, Start Num: 6

Candidate Starts for Rings_31:

(Start: 6 @16809 has 27 MA's), (8, 16818), (9, 16821), (11, 16848), (15, 16893), (20, 17073), (33, 17265), (34, 17280), (36, 17298), (37, 17301),

Gene: Sarkar_60 Start: 31579, Stop: 32271, Start Num: 1

Candidate Starts for Sarkar_60:

(1, 31579), (Start: 3 @31705 has 8 MA's), (7, 31750), (17, 31942), (22, 32035), (23, 32038), (24, 32101), (27, 32134), (35, 32245),

Gene: Satis_57 Start: 31701, Stop: 32267, Start Num: 3

Candidate Starts for Satis_57:

(1, 31575), (Start: 3 @31701 has 8 MA's), (7, 31746), (17, 31938), (22, 32031), (23, 32034), (24, 32097), (27, 32130), (35, 32241),

Gene: SorJuana_33 Start: 17189, Stop: 17683, Start Num: 6

Candidate Starts for SorJuana_33:

(Start: 6 @17189 has 27 MA's), (8, 17198), (9, 17201), (13, 17255), (18, 17438), (27, 17561), (29, 17600), (30, 17621), (34, 17657),

Gene: SorJuana_32 Start: 16687, Stop: 17187, Start Num: 6

Candidate Starts for SorJuana_32:

(Start: 6 @16687 has 27 MA's), (8, 16696), (9, 16699), (11, 16726), (15, 16771), (20, 16951), (33, 17143), (34, 17158), (36, 17176), (37, 17179),

Gene: Thunderclap_32 Start: 16707, Stop: 17207, Start Num: 6

Candidate Starts for Thunderclap_32:

(Start: 6 @16707 has 27 MA's), (8, 16716), (9, 16719), (11, 16746), (15, 16791), (20, 16971), (33, 17163), (34, 17178), (36, 17196), (37, 17199),

Gene: Thunderclap_33 Start: 17209, Stop: 17703, Start Num: 6

Candidate Starts for Thunderclap_33:

(Start: 6 @17209 has 27 MA's), (8, 17218), (9, 17221), (13, 17275), (18, 17458), (27, 17581), (29, 17620), (30, 17641), (34, 17677),

Gene: Yappy_64 Start: 22654, Stop: 23166, Start Num: 6

Candidate Starts for Yappy_64:

(Start: 6 @22654 has 27 MA's), (8, 22663), (16, 22759), (28, 23059), (31, 23104),

Gene: Yeezus_31 Start: 16677, Stop: 17177, Start Num: 6

Candidate Starts for Yeezus_31:

(Start: 6 @16677 has 27 MA's), (8, 16686), (9, 16689), (11, 16716), (15, 16761), (20, 16941), (33, 17133), (34, 17148), (36, 17166), (37, 17169),

Gene: Yeezus_32 Start: 17179, Stop: 17673, Start Num: 6

Candidate Starts for Yeezus_32:

(Start: 6 @17179 has 27 MA's), (8, 17188), (9, 17191), (13, 17245), (18, 17428), (27, 17551), (29, 17590), (30, 17611), (34, 17647),