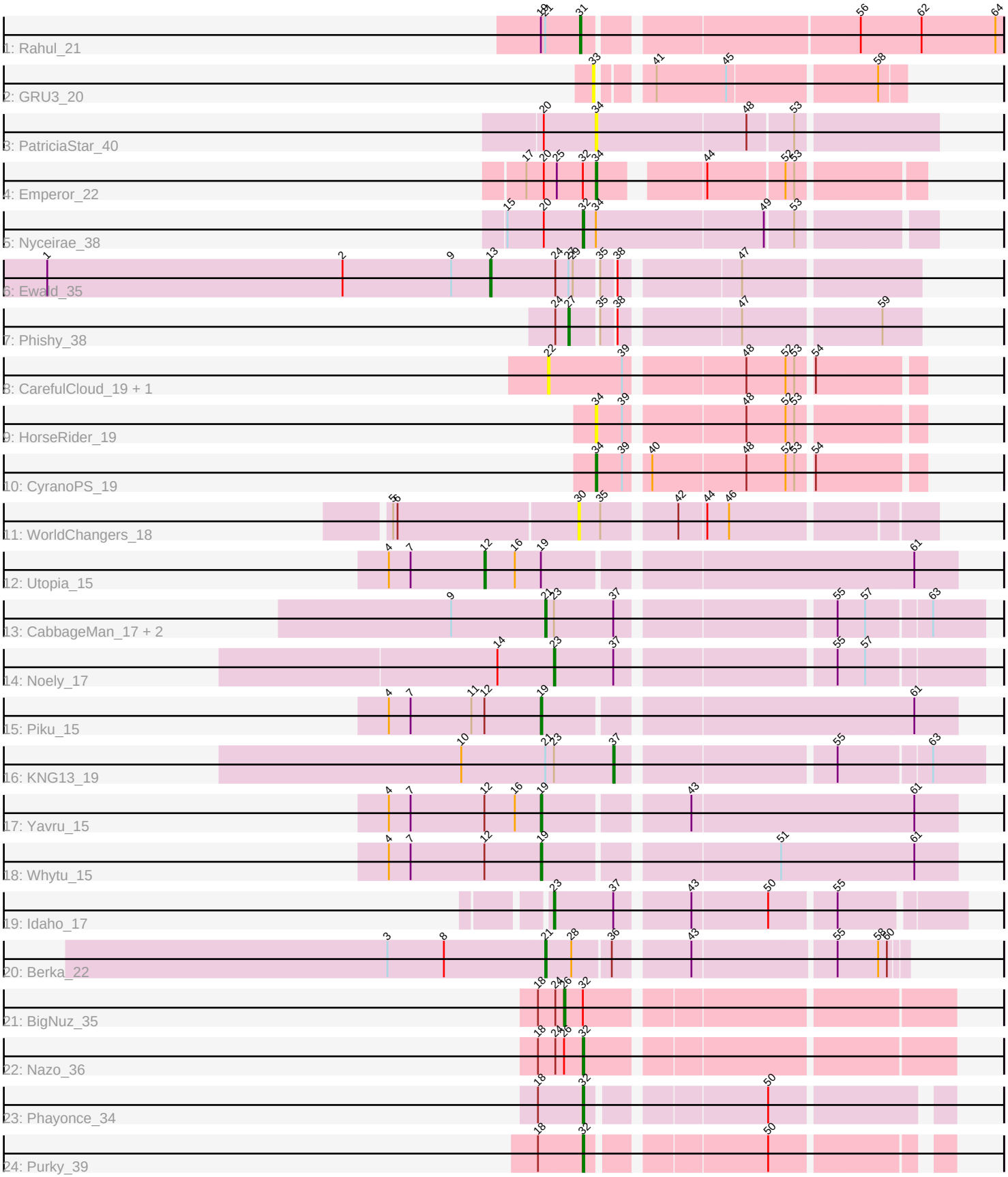
Pham 311920


1: Rahul_21
2: GRU3_20
3: PatriciaStar_40
4: Emperor_22
5: Nyceirae_38
6: Ewald_35
7: Phishy_38
8: CarefulCloud_19 + 1
9: HorseRider_19
10: CyranoPS_19
11: WorldChangers_18
12: Utopia_15
13: CabbageMan_17 + 2
14: Noely_17
15: Piku_15
16: KNG13_19
17: Yavru_15
18: Whytu_15
19: Idaho_17
20: Berka_22
21: BigNuz_35
22: Nazo_36
23: Phayonce_34
24: Purky_39

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 311920 Report

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

Pham number 311920 has 27 members, 6 are drafts.

Phages represented in each track:
- Track 1 : Rahul_21
- Track 2 : GRU3_20
- Track 3 : PatriciaStar_40
- Track 4 : Emperor_22
- Track 5 : Nyceirae_38
- Track 6 : Ewald_35
- Track 7 : Phishy_38
- Track 8 : CarefulCloud_19, TailX7_19
- Track 9 : HorseRider_19
- Track 10 : CyranoPS_19
- Track 11 : WorldChangers_18
- Track 12 : Utopia_15
- Track 13 : CabbageMan_17, Pauu_18, LauKoruNamu_18
- Track 14 : Noely_17
- Track 15 : Piku_15
- Track 16 : KNG13_19
- Track 17 : Yavru_15
- Track 18 : Whytu_15
- Track 19 : Idaho_17
- Track 20 : Berka_22
- Track 21 : BigNuz_35
- Track 22 : Nazo_36
- Track 23 : Phayonce_34
- Track 24 : Purky_39

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

The start number called the most often in the published annotations is 32, it was called in 4 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Nazo_36, Nyceirae_38, Phayonce_34, Purky_39,

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

• BigNuz_35, Emperor_22,

Genes that do not have the "Most Annotated" start:
• Berka_22, CabbageMan_17, CarefulCloud_19, CyranoPS_19, Ewald_35, GRU3_20, HorseRider_19, Idaho_17, KNG13_19, LauKoruNamu_18, Noely_17, PatriciaStar_40, Pauu_18, Phishy_38, Piku_15, Rahul_21, TailX7_19, Utopia_15, Whytu_15, WorldChangers_18, Yavru_15,

Summary by start number:

Start 12:
• Found in 4 of 27 (14.8%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Utopia_15 (FE),

Start 13:
• Found in 1 of 27 (3.7%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ewald_35 (DT),

Start 19:
• Found in 5 of 27 (18.5%) of genes in pham
• Manual Annotations of this start: 3 of 21
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Piku_15 (FE), Whytu_15 (FE), Yavru_15 (FE),

Start 21:
• Found in 6 of 27 (22.2%) of genes in pham
• Manual Annotations of this start: 4 of 21
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Berka_22 (FE), CabbageMan_17 (FE), LauKoruNamu_18 (FE), Pauu_18 (FE),

Start 22:
• Found in 2 of 27 (7.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CarefulCloud_19 (ER), TailX7_19 (ER),

Start 23:
• Found in 6 of 27 (22.2%) of genes in pham
• Manual Annotations of this start: 2 of 21
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Idaho_17 (FE), Noely_17 (FE),

Start 26:
• Found in 2 of 27 (7.4%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 50.0% of time when present
• Phage (with cluster) where this start called: BigNuz_35 (P4),

Start 27:
• Found in 2 of 27 (7.4%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Phishy_38 (DT),

Start 30:
• Found in 1 of 27 (3.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: WorldChangers_18 (FE),

Start 31:
• Found in 1 of 27 (3.7%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rahul_21 (CW2),

Start 32:
• Found in 6 of 27 (22.2%) of genes in pham
• Manual Annotations of this start: 4 of 21
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Nazo_36 (P4), Nyceirae_38 (DT), Phayonce_34 (P5), Purky_39 (P6),

Start 33:
• Found in 1 of 27 (3.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GRU3_20 (CW2),

Start 34:
• Found in 5 of 27 (18.5%) of genes in pham
• Manual Annotations of this start: 2 of 21
• Called 80.0% of time when present
• Phage (with cluster) where this start called: CyranoPS_19 (ER), Emperor_22 (DM), HorseRider_19 (ER), PatriciaStar_40 (DB),

Start 37:
• Found in 6 of 27 (22.2%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 16.7% of time when present
• Phage (with cluster) where this start called: KNG13_19 (FE),

Summary by clusters:

There are 9 clusters represented in this pham: DM, P6, P4, P5, CW2, DB, FE, DT, ER,

Info for manual annotations of cluster CW2:
•Start number 31 was manually annotated 1 time for cluster CW2.

Info for manual annotations of cluster DM:
•Start number 34 was manually annotated 1 time for cluster DM.

Info for manual annotations of cluster DT:
•Start number 13 was manually annotated 1 time for cluster DT.
•Start number 27 was manually annotated 1 time for cluster DT.
•Start number 32 was manually annotated 1 time for cluster DT.

Info for manual annotations of cluster ER:
•Start number 34 was manually annotated 1 time for cluster ER.

Info for manual annotations of cluster FE:
•Start number 12 was manually annotated 1 time for cluster FE.
•Start number 19 was manually annotated 3 times for cluster FE.
•Start number 21 was manually annotated 4 times for cluster FE.
•Start number 23 was manually annotated 2 times for cluster FE.
•Start number 37 was manually annotated 1 time for cluster FE.

Info for manual annotations of cluster P4:
•Start number 26 was manually annotated 1 time for cluster P4.
•Start number 32 was manually annotated 1 time for cluster P4.

Info for manual annotations of cluster P5:
•Start number 32 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:
•Start number 32 was manually annotated 1 time for cluster P6.

Gene Information:

Gene: Berka_22 Start: 13026, Stop: 13250, Start Num: 21
Candidate Starts for Berka_22:
(3, 12918), (8, 12957), (Start: 21 @13026 has 4 MA's), (28, 13044), (36, 13068), (43, 13113), (55, 13206), (58, 13233), (60, 13239),

Gene: BigNuz_35 Start: 29592, Stop: 29837, Start Num: 26
Candidate Starts for BigNuz_35:
(18, 29574), (24, 29586), (Start: 26 @29592 has 1 MA's), (Start: 32 @29604 has 4 MA's),

Gene: CabbageMan_17 Start: 13096, Stop: 13374, Start Num: 21
Candidate Starts for CabbageMan_17:
(9, 13033), (Start: 21 @13096 has 4 MA's), (Start: 23 @13102 has 2 MA's), (Start: 37 @13141 has 1 MA's), (55, 13279), (57, 13297), (63, 13339),

Gene: CarefulCloud_19 Start: 12759, Stop: 12995, Start Num: 22
Candidate Starts for CarefulCloud_19:
(22, 12759), (39, 12810), (48, 12885), (52, 12912), (53, 12918), (54, 12927),

Gene: CyranoPS_19 Start: 12813, Stop: 13016, Start Num: 34
Candidate Starts for CyranoPS_19:

(Start: 34 @12813 has 2 MA's), (39, 12831), (40, 12843), (48, 12906), (52, 12933), (53, 12939), (54, 12948),

Gene: Emperor_22 Start: 15163, Stop: 15360, Start Num: 34
Candidate Starts for Emperor_22:
(17, 15115), (20, 15127), (25, 15136), (Start: 32 @15154 has 4 MA's), (Start: 34 @15163 has 2 MA's), (44, 15223), (52, 15274), (53, 15280),

Gene: Ewald_35 Start: 29931, Stop: 30203, Start Num: 13
Candidate Starts for Ewald_35:
(1, 29625), (2, 29829), (9, 29904), (Start: 13 @29931 has 1 MA's), (24, 29976), (Start: 27 @29985 has 1 MA's), (29, 29988), (35, 30003), (38, 30012), (47, 30087),

Gene: GRU3_20 Start: 14761, Stop: 14949, Start Num: 33
Candidate Starts for GRU3_20:
(33, 14761), (41, 14788), (45, 14836), (58, 14932),

Gene: HorseRider_19 Start: 12860, Stop: 13063, Start Num: 34
Candidate Starts for HorseRider_19:
(Start: 34 @12860 has 2 MA's), (39, 12878), (48, 12953), (52, 12980), (53, 12986),

Gene: Idaho_17 Start: 13517, Stop: 13774, Start Num: 23
Candidate Starts for Idaho_17:
(Start: 23 @13517 has 2 MA's), (Start: 37 @13556 has 1 MA's), (43, 13601), (50, 13652), (55, 13694),

Gene: KNG13_19 Start: 13297, Stop: 13530, Start Num: 37
Candidate Starts for KNG13_19:
(10, 13195), (Start: 21 @13252 has 4 MA's), (Start: 23 @13258 has 2 MA's), (Start: 37 @13297 has 1 MA's), (55, 13435), (63, 13495),

Gene: LauKoruNamu_18 Start: 13096, Stop: 13374, Start Num: 21
Candidate Starts for LauKoruNamu_18:
(9, 13033), (Start: 21 @13096 has 4 MA's), (Start: 23 @13102 has 2 MA's), (Start: 37 @13141 has 1 MA's), (55, 13279), (57, 13297), (63, 13339),

Gene: Nazo_36 Start: 29606, Stop: 29839, Start Num: 32
Candidate Starts for Nazo_36:
(18, 29576), (24, 29588), (Start: 26 @29594 has 1 MA's), (Start: 32 @29606 has 4 MA's),

Gene: Noely_17 Start: 12627, Stop: 12899, Start Num: 23
Candidate Starts for Noely_17:
(14, 12588), (Start: 23 @12627 has 2 MA's), (Start: 37 @12666 has 1 MA's), (55, 12804), (57, 12822),

Gene: Nyceirae_38 Start: 30354, Stop: 30581, Start Num: 32
Candidate Starts for Nyceirae_38:
(15, 30303), (20, 30327), (Start: 32 @30354 has 4 MA's), (Start: 34 @30363 has 2 MA's), (49, 30477), (53, 30495),

Gene: PatriciaStar_40 Start: 32550, Stop: 32774, Start Num: 34
Candidate Starts for PatriciaStar_40:
(20, 32514), (Start: 34 @32550 has 2 MA's), (48, 32652), (53, 32682),

Gene: Pauu_18 Start: 13096, Stop: 13374, Start Num: 21

Candidate Starts for Pauu_18:
(9, 13033), (Start: 21 @13096 has 4 MA's), (Start: 23 @13102 has 2 MA's), (Start: 37 @13141 has 1 MA's), (55, 13279), (57, 13297), (63, 13339),

Gene: Phayonce_34 Start: 29517, Stop: 29735, Start Num: 32
Candidate Starts for Phayonce_34:
(18, 29487), (Start: 32 @29517 has 4 MA's), (50, 29625),

Gene: Phishy_38 Start: 31603, Stop: 31821, Start Num: 27
Candidate Starts for Phishy_38:
(24, 31594), (Start: 27 @31603 has 1 MA's), (35, 31621), (38, 31630), (47, 31705), (59, 31795),

Gene: Piku_15 Start: 12477, Stop: 12746, Start Num: 19
Candidate Starts for Piku_15:
(4, 12372), (7, 12387), (11, 12429), (Start: 12 @12438 has 1 MA's), (Start: 19 @12477 has 3 MA's), (61, 12717),

Gene: Purky_39 Start: 30247, Stop: 30462, Start Num: 32
Candidate Starts for Purky_39:
(18, 30217), (Start: 32 @30247 has 4 MA's), (50, 30355),

Gene: Rahul_21 Start: 14448, Stop: 14720, Start Num: 31
Candidate Starts for Rahul_21:
(Start: 19 @14421 has 3 MA's), (Start: 21 @14424 has 4 MA's), (Start: 31 @14448 has 1 MA's), (56, 14622), (62, 14664), (64, 14715),

Gene: TailX7_19 Start: 12907, Stop: 13143, Start Num: 22
Candidate Starts for TailX7_19:
(22, 12907), (39, 12958), (48, 13033), (52, 13060), (53, 13066), (54, 13075),

Gene: Utopia_15 Start: 12409, Stop: 12717, Start Num: 12
Candidate Starts for Utopia_15:
(4, 12343), (7, 12358), (Start: 12 @12409 has 1 MA's), (16, 12430), (Start: 19 @12448 has 3 MA's), (61, 12688),

Gene: Whytu_15 Start: 12543, Stop: 12812, Start Num: 19
Candidate Starts for Whytu_15:
(4, 12438), (7, 12453), (Start: 12 @12504 has 1 MA's), (Start: 19 @12543 has 3 MA's), (51, 12693), (61, 12783),

Gene: WorldChangers_18 Start: 12884, Stop: 13108, Start Num: 30
Candidate Starts for WorldChangers_18:
(5, 12761), (6, 12764), (30, 12884), (35, 12899), (42, 12944), (44, 12962), (46, 12977),

Gene: Yavru_15 Start: 12438, Stop: 12707, Start Num: 19
Candidate Starts for Yavru_15:
(4, 12333), (7, 12348), (Start: 12 @12399 has 1 MA's), (16, 12420), (Start: 19 @12438 has 3 MA's), (43, 12528), (61, 12678),