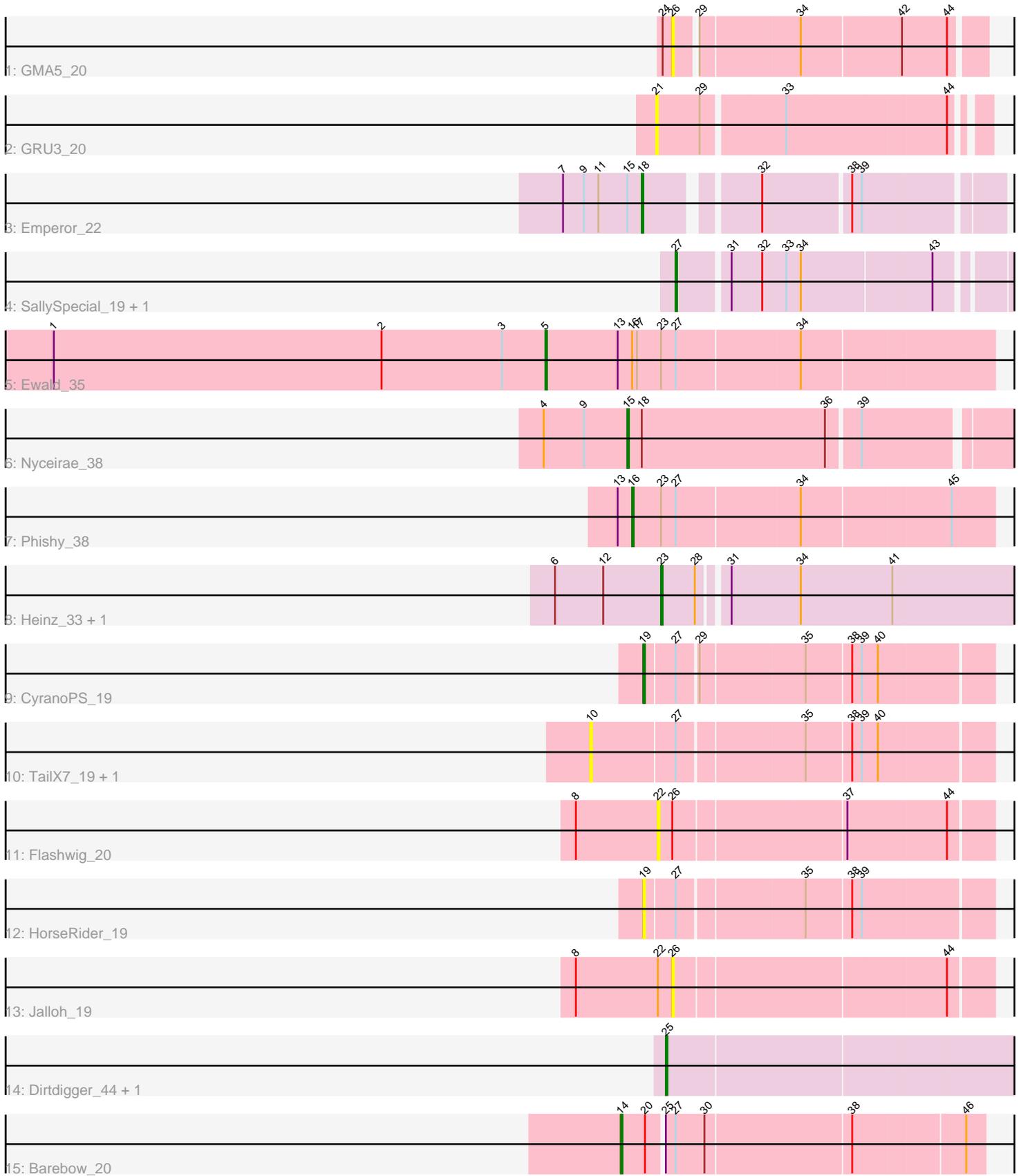


Pham 291575



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 291575 Report

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

Pham number 291575 has 19 members, 9 are drafts.

Phages represented in each track:

- Track 1 : GMA5\_20
- Track 2 : GRU3\_20
- Track 3 : Emperor\_22
- Track 4 : SallySpecial\_19, Dirtfootball\_22
- Track 5 : Ewald\_35
- Track 6 : Nyceirae\_38
- Track 7 : Phishy\_38
- Track 8 : Heinz\_33, Hibiscus\_34
- Track 9 : CyranoPS\_19
- Track 10 : TailX7\_19, CarefulCloud\_19
- Track 11 : Flashwig\_20
- Track 12 : HorseRider\_19
- Track 13 : Jalloh\_19
- Track 14 : Dirdigger\_44, Gusanita\_41
- Track 15 : Barebow\_20

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

The start number called the most often in the published annotations is 23, it was called in 2 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Heinz\_33, Hibiscus\_34,

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

- Ewald\_35, Phishy\_38,

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

- Barebow\_20, CarefulCloud\_19, CyranoPS\_19, Dirdigger\_44, Dirtfootball\_22, Emperor\_22, Flashwig\_20, GMA5\_20, GRU3\_20, Gusanita\_41, HorseRider\_19, Jalloh\_19, Nyceirae\_38, SallySpecial\_19, TailX7\_19,

### **Summary by start number:**

Start 5:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ewald\_35 (DT),

Start 10:

- Found in 2 of 19 ( 10.5% ) 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 14:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barebow\_20 (singleton),

Start 15:

- Found in 2 of 19 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Nyceirae\_38 (DT),

Start 16:

- Found in 2 of 19 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Phishy\_38 (DT),

Start 18:

- Found in 2 of 19 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Emperor\_22 (DM),

Start 19:

- Found in 2 of 19 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CyranoPS\_19 (ER), HorseRider\_19 (ER),

Start 21:

- Found in 1 of 19 ( 5.3% ) 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 22:

- Found in 2 of 19 ( 10.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present

- Phage (with cluster) where this start called: Flashwig\_20 (ER),

Start 23:

- Found in 4 of 19 ( 21.1% ) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Heinz\_33 (DY), Hibiscus\_34 (DY),

Start 25:

- Found in 3 of 19 ( 15.8% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Dirtdigger\_44 (FF), Gusanita\_41 (FF),

Start 26:

- Found in 3 of 19 ( 15.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: GMA5\_20 (CW2), Jalloh\_19 (ER),

Start 27:

- Found in 9 of 19 ( 47.4% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Dirtfootball\_22 (DM), SallySpecial\_19 (DM),

### **Summary by clusters:**

There are 7 clusters represented in this pham: singleton, DM, CW2, FF, DY, DT, ER,

Info for manual annotations of cluster DM:

- Start number 18 was manually annotated 1 time for cluster DM.
- Start number 27 was manually annotated 1 time for cluster DM.

Info for manual annotations of cluster DT:

- Start number 5 was manually annotated 1 time for cluster DT.
- Start number 15 was manually annotated 1 time for cluster DT.
- Start number 16 was manually annotated 1 time for cluster DT.

Info for manual annotations of cluster DY:

- Start number 23 was manually annotated 2 times for cluster DY.

Info for manual annotations of cluster ER:

- Start number 19 was manually annotated 1 time for cluster ER.

Info for manual annotations of cluster FF:

- Start number 25 was manually annotated 1 time for cluster FF.

### **Gene Information:**

Gene: Barebow\_20 Start: 15759, Stop: 15971, Start Num: 14

Candidate Starts for Barebow\_20:

(Start: 14 @15759 has 1 MA's), (20, 15774), (Start: 25 @15783 has 1 MA's), (Start: 27 @15789 has 1 MA's), (30, 15807), (38, 15894), (46, 15960),

Gene: CarefulCloud\_19 Start: 12759, Stop: 12995, Start Num: 10

Candidate Starts for CarefulCloud\_19:

(10, 12759), (Start: 27 @12810 has 1 MA's), (35, 12885), (38, 12912), (39, 12918), (40, 12927),

Gene: CyranoPS\_19 Start: 12813, Stop: 13016, Start Num: 19

Candidate Starts for CyranoPS\_19:

(Start: 19 @12813 has 1 MA's), (Start: 27 @12831 has 1 MA's), (29, 12843), (35, 12906), (38, 12933), (39, 12939), (40, 12948),

Gene: Dirdigger\_44 Start: 30893, Stop: 31102, Start Num: 25

Candidate Starts for Dirdigger\_44:

(Start: 25 @30893 has 1 MA's),

Gene: Dirtfootball\_22 Start: 14446, Stop: 14637, Start Num: 27

Candidate Starts for Dirtfootball\_22:

(Start: 27 @14446 has 1 MA's), (31, 14476), (32, 14494), (33, 14509), (34, 14518), (43, 14596),

Gene: Emperor\_22 Start: 15163, Stop: 15360, Start Num: 18

Candidate Starts for Emperor\_22:

(7, 15115), (9, 15127), (11, 15136), (Start: 15 @15154 has 1 MA's), (Start: 18 @15163 has 1 MA's), (32, 15223), (38, 15274), (39, 15280),

Gene: Ewald\_35 Start: 29931, Stop: 30203, Start Num: 5

Candidate Starts for Ewald\_35:

(1, 29625), (2, 29829), (3, 29904), (Start: 5 @29931 has 1 MA's), (13, 29976), (Start: 16 @29985 has 1 MA's), (17, 29988), (Start: 23 @30003 has 2 MA's), (Start: 27 @30012 has 1 MA's), (34, 30087),

Gene: Flashwig\_20 Start: 13383, Stop: 13580, Start Num: 22

Candidate Starts for Flashwig\_20:

(8, 13332), (22, 13383), (26, 13392), (37, 13494), (44, 13554),

Gene: GMA5\_20 Start: 14712, Stop: 14891, Start Num: 26

Candidate Starts for GMA5\_20:

(24, 14706), (26, 14712), (29, 14724), (34, 14784), (42, 14844), (44, 14871),

Gene: GRU3\_20 Start: 14761, Stop: 14949, Start Num: 21

Candidate Starts for GRU3\_20:

(21, 14761), (29, 14788), (33, 14836), (44, 14932),

Gene: Gusanita\_41 Start: 30644, Stop: 30853, Start Num: 25

Candidate Starts for Gusanita\_41:

(Start: 25 @30644 has 1 MA's),

Gene: Heinz\_33 Start: 25599, Stop: 25826, Start Num: 23

Candidate Starts for Heinz\_33:

(6, 25533), (12, 25563), (Start: 23 @25599 has 2 MA's), (28, 25620), (31, 25635), (34, 25677), (41, 25734),

Gene: Hibiscus\_34 Start: 25548, Stop: 25775, Start Num: 23

Candidate Starts for Hibiscus\_34:

(6, 25482), (12, 25512), (Start: 23 @25548 has 2 MA's), (28, 25569), (31, 25584), (34, 25626), (41, 25683),

Gene: HorseRider\_19 Start: 12860, Stop: 13063, Start Num: 19

Candidate Starts for HorseRider\_19:

(Start: 19 @12860 has 1 MA's), (Start: 27 @12878 has 1 MA's), (35, 12953), (38, 12980), (39, 12986),

Gene: Jalloh\_19 Start: 12648, Stop: 12836, Start Num: 26

Candidate Starts for Jalloh\_19:

(8, 12588), (22, 12639), (26, 12648), (44, 12810),

Gene: Nyceirae\_38 Start: 30354, Stop: 30581, Start Num: 15

Candidate Starts for Nyceirae\_38:

(4, 30303), (9, 30327), (Start: 15 @30354 has 1 MA's), (Start: 18 @30363 has 1 MA's), (36, 30477), (39, 30495),

Gene: Phishy\_38 Start: 31603, Stop: 31821, Start Num: 16

Candidate Starts for Phishy\_38:

(13, 31594), (Start: 16 @31603 has 1 MA's), (Start: 23 @31621 has 2 MA's), (Start: 27 @31630 has 1 MA's), (34, 31705), (45, 31795),

Gene: SallySpecial\_19 Start: 14475, Stop: 14666, Start Num: 27

Candidate Starts for SallySpecial\_19:

(Start: 27 @14475 has 1 MA's), (31, 14505), (32, 14523), (33, 14538), (34, 14547), (43, 14625),

Gene: TailX7\_19 Start: 12907, Stop: 13143, Start Num: 10

Candidate Starts for TailX7\_19:

(10, 12907), (Start: 27 @12958 has 1 MA's), (35, 13033), (38, 13060), (39, 13066), (40, 13075),