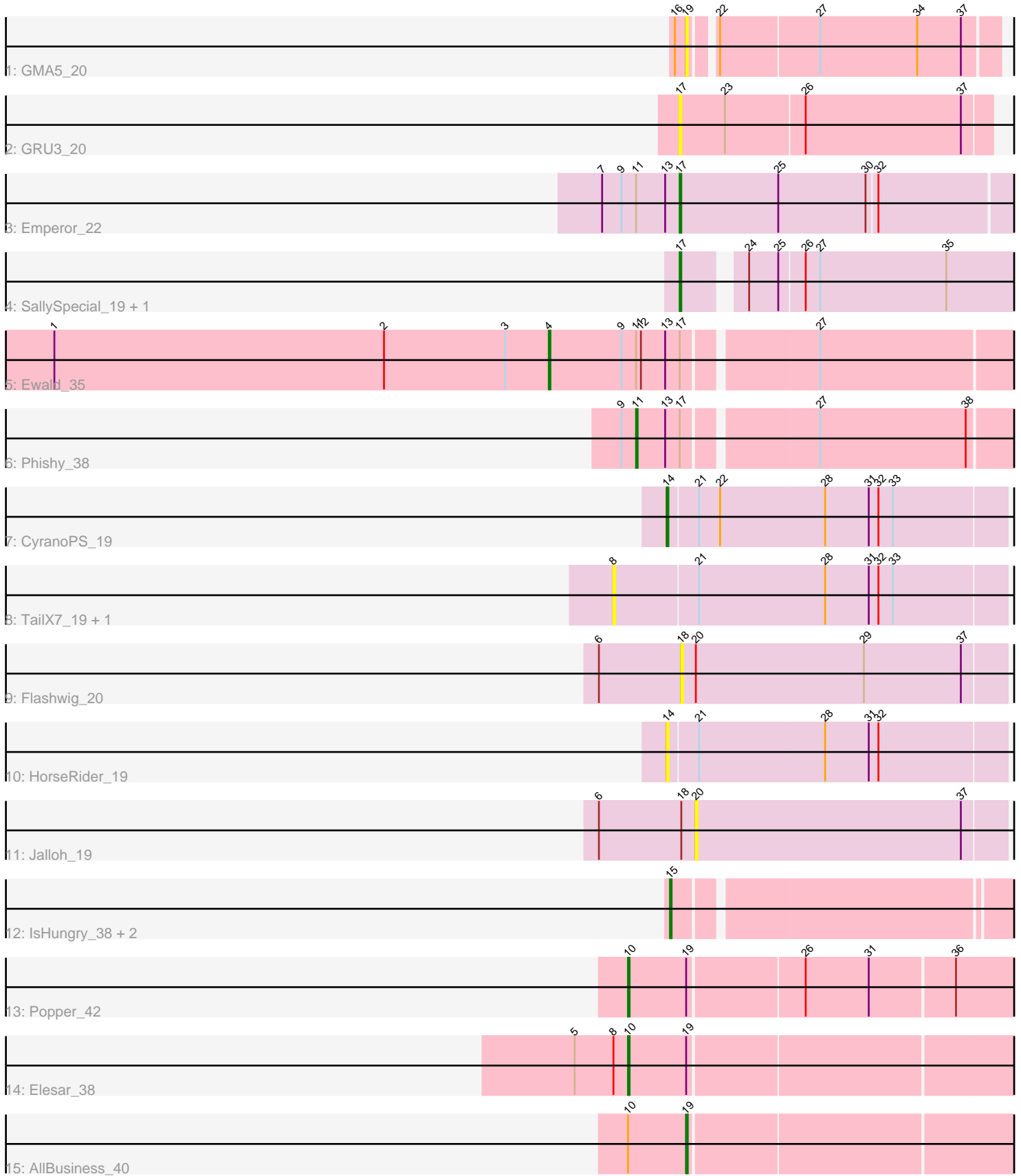


Pham 295118



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 295118 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295118 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 : Phishy\_38
- Track 7 : CyranoPS\_19
- Track 8 : TailX7\_19, CarefulCloud\_19
- Track 9 : Flashwig\_20
- Track 10 : HorseRider\_19
- Track 11 : Jalloh\_19
- Track 12 : IsHungry\_38, Dirdigger\_44, Gusanita\_41
- Track 13 : Popper\_42
- Track 14 : Elesar\_38
- Track 15 : AllBusiness\_40

### ***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 2 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Elesar\_38, Popper\_42,

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

- AllBusiness\_40,

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

- CarefulCloud\_19, CyranoPS\_19, Dirdigger\_44, Dirtfootball\_22, Emperor\_22, Ewald\_35, Flashwig\_20, GMA5\_20, GRU3\_20, Gusanita\_41, HorseRider\_19, IsHungry\_38, Jalloh\_19, Phishy\_38, SallySpecial\_19, TailX7\_19,

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

Start 4:

- 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 8:

- 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: CarefulCloud\_19 (ER), TailX7\_19 (ER),

Start 10:

- Found in 3 of 19 ( 15.8% ) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Elesar\_38 (FF), Popper\_42 (FF),

Start 11:

- Found in 3 of 19 ( 15.8% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Phishy\_38 (DT),

Start 14:

- 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 15:

- Found in 3 of 19 ( 15.8% ) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dirtdigger\_44 (FF), Gusanita\_41 (FF), IsHungry\_38 (FF),

Start 17:

- Found in 6 of 19 ( 31.6% ) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Dirtfootball\_22 (DM), Emperor\_22 (DM), GRU3\_20 (CW2), SallySpecial\_19 (DM),

Start 18:

- 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 19:

- Found in 4 of 19 ( 21.1% ) 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: AllBusiness\_40 (FF), GMA5\_20 (CW2),

Start 20:

- 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: Jalloh\_19 (ER),

### **Summary by clusters:**

There are 5 clusters represented in this pham: DT, DM, CW2, FF, ER,

Info for manual annotations of cluster DM:

- Start number 17 was manually annotated 2 times for cluster DM.

Info for manual annotations of cluster DT:

- Start number 4 was manually annotated 1 time for cluster DT.
- Start number 11 was manually annotated 1 time for cluster DT.

Info for manual annotations of cluster ER:

- Start number 14 was manually annotated 1 time for cluster ER.

Info for manual annotations of cluster FF:

- Start number 10 was manually annotated 2 times for cluster FF.
- Start number 15 was manually annotated 2 times for cluster FF.
- Start number 19 was manually annotated 1 time for cluster FF.

### **Gene Information:**

Gene: AllBusiness\_40 Start: 31222, Stop: 31440, Start Num: 19

Candidate Starts for AllBusiness\_40:

(Start: 10 @31186 has 2 MA's), (Start: 19 @31222 has 1 MA's),

Gene: CarefulCloud\_19 Start: 12759, Stop: 12995, Start Num: 8

Candidate Starts for CarefulCloud\_19:

(8, 12759), (21, 12810), (28, 12885), (31, 12912), (32, 12918), (33, 12927),

Gene: CyranoPS\_19 Start: 12813, Stop: 13016, Start Num: 14

Candidate Starts for CyranoPS\_19:

(Start: 14 @12813 has 1 MA's), (21, 12831), (22, 12843), (28, 12906), (31, 12933), (32, 12939), (33, 12948),

Gene: Dirtdigger\_44 Start: 30893, Stop: 31102, Start Num: 15

Candidate Starts for Dirtdigger\_44:

(Start: 15 @30893 has 2 MA's),

Gene: Dirtfootball\_22 Start: 14446, Stop: 14637, Start Num: 17

Candidate Starts for Dirtfootball\_22:

(Start: 17 @14446 has 2 MA's), (24, 14476), (25, 14494), (26, 14509), (27, 14518), (35, 14596),

Gene: Elesar\_38 Start: 30965, Stop: 31219, Start Num: 10

Candidate Starts for Elesar\_38:

(5, 30932), (8, 30956), (Start: 10 @30965 has 2 MA's), (Start: 19 @31001 has 1 MA's),

Gene: Emperor\_22 Start: 15163, Stop: 15360, Start Num: 17

Candidate Starts for Emperor\_22:

(7, 15115), (9, 15127), (Start: 11 @15136 has 1 MA's), (13, 15154), (Start: 17 @15163 has 2 MA's), (25, 15223), (30, 15274), (32, 15280),

Gene: Ewald\_35 Start: 29931, Stop: 30203, Start Num: 4

Candidate Starts for Ewald\_35:

(1, 29625), (2, 29829), (3, 29904), (Start: 4 @29931 has 1 MA's), (9, 29976), (Start: 11 @29985 has 1 MA's), (12, 29988), (13, 30003), (Start: 17 @30012 has 2 MA's), (27, 30087),

Gene: Flashwig\_20 Start: 13383, Stop: 13580, Start Num: 18

Candidate Starts for Flashwig\_20:

(6, 13332), (18, 13383), (20, 13392), (29, 13494), (37, 13554),

Gene: GMA5\_20 Start: 14712, Stop: 14891, Start Num: 19

Candidate Starts for GMA5\_20:

(16, 14706), (Start: 19 @14712 has 1 MA's), (22, 14724), (27, 14784), (34, 14844), (37, 14871),

Gene: GRU3\_20 Start: 14761, Stop: 14949, Start Num: 17

Candidate Starts for GRU3\_20:

(Start: 17 @14761 has 2 MA's), (23, 14788), (26, 14836), (37, 14932),

Gene: Gusanita\_41 Start: 30644, Stop: 30853, Start Num: 15

Candidate Starts for Gusanita\_41:

(Start: 15 @30644 has 2 MA's),

Gene: HorseRider\_19 Start: 12860, Stop: 13063, Start Num: 14

Candidate Starts for HorseRider\_19:

(Start: 14 @12860 has 1 MA's), (21, 12878), (28, 12953), (31, 12980), (32, 12986),

Gene: IsHungry\_38 Start: 28831, Stop: 29040, Start Num: 15

Candidate Starts for IsHungry\_38:

(Start: 15 @28831 has 2 MA's),

Gene: Jalloh\_19 Start: 12648, Stop: 12836, Start Num: 20

Candidate Starts for Jalloh\_19:

(6, 12588), (18, 12639), (20, 12648), (37, 12810),

Gene: Phishy\_38 Start: 31603, Stop: 31821, Start Num: 11

Candidate Starts for Phishy\_38:

(9, 31594), (Start: 11 @31603 has 1 MA's), (13, 31621), (Start: 17 @31630 has 2 MA's), (27, 31705), (38, 31795),

Gene: Popper\_42 Start: 30120, Stop: 30374, Start Num: 10

Candidate Starts for Popper\_42:

(Start: 10 @30120 has 2 MA's), (Start: 19 @30156 has 1 MA's), (26, 30225), (31, 30264), (36, 30315),

Gene: SallySpecial\_19 Start: 14475, Stop: 14666, Start Num: 17

Candidate Starts for SallySpecial\_19:

(Start: 17 @14475 has 2 MA's), (24, 14505), (25, 14523), (26, 14538), (27, 14547), (35, 14625),

Gene: TailX7\_19 Start: 12907, Stop: 13143, Start Num: 8

Candidate Starts for TailX7\_19:

(8, 12907), (21, 12958), (28, 13033), (31, 13060), (32, 13066), (33, 13075),