

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 88379 Report

This analysis was run 04/05/24 on database version 557.

Pham number 88379 has 7 members, 4 are drafts.

Phages represented in each track:

Track 1 : PhriskyACE 28

• Track 2 : Dolores 29 Track 3 : Belphegor\_23

Track 4 : Lambo 5

Track 5 : Ranch\_5Track 6 : Hum25\_26

• Track 7 : Pine5 21

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

The start number called the most often in the published annotations is 14, it was called in 1 of the 3 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Dolores 29,

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

Belphegor\_23,

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

• Hum25\_26, Lambo\_5, PhriskyACE\_28, Pine5\_21, Ranch\_5,

# Summary by start number:

#### Start 1:

- Found in 1 of 7 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 3
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lambo\_5 (DV),

## Start 6:

- Found in 1 of 7 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Pine5\_21 (singleton),

#### Start 8:

- Found in 1 of 7 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 3
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ranch\_5 (DV),

#### Start 9:

- Found in 1 of 7 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PhriskyACE\_28 (CZ4),

### Start 10:

- Found in 2 of 7 (28.6%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Hum25\_26 (FQ),

#### Start 14:

- Found in 2 of 7 (28.6%) of genes in pham
- Manual Annotations of this start: 1 of 3
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Dolores\_29 (CZ4),

#### Start 16:

- Found in 1 of 7 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belphegor 23 (DE),

### Summary by clusters:

There are 5 clusters represented in this pham: DV, FQ, singleton, DE, CZ4,

Info for manual annotations of cluster CZ4:

•Start number 14 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DV:

- •Start number 1 was manually annotated 1 time for cluster DV.
- •Start number 8 was manually annotated 1 time for cluster DV.

### Gene Information:

Gene: Belphegor 23 Start: 18351, Stop: 19574, Start Num: 16

Candidate Starts for Belphegor 23:

(12, 18330), (Start: 14 @18339 has 1 MA's), (16, 18351), (22, 18402), (30, 18510), (34, 18582), (36, 18594), (43, 18657), (58, 18858), (62, 18963), (66, 18984), (109, 19458),

Gene: Dolores\_29 Start: 24052, Stop: 25317, Start Num: 14

Candidate Starts for Dolores 29:

(10, 24037), (Start: 14 @24052 has 1 MA's), (17, 24073), (31, 24247), (41, 24346), (46, 24433), (48, 24454), (51, 24481), (54, 24526), (58, 24592), (68, 24730), (75, 24802), (78, 24838), (80, 24847), (81, 24859), (108, 25195), (111, 25237), (114, 25249),

Gene: Hum25\_26 Start: 18853, Stop: 20148, Start Num: 10

Candidate Starts for Hum25\_26:

(10, 18853), (24, 18958), (26, 18979), (37, 19132), (38, 19138), (42, 19180), (43, 19192), (56, 19369), (57, 19375), (58, 19393), (61, 19480), (62, 19486), (69, 19522), (70, 19555), (73, 19612), (76, 19636), (77, 19660), (78, 19675), (83, 19726), (89, 19828), (99, 19954), (101, 19963), (110, 20050), (115, 20089), (116, 20098), (117, 20125),

Gene: Lambo\_5 Start: 4968, Stop: 6464, Start Num: 1

Candidate Starts for Lambo\_5:

(Start: 1 @ 4968 has 1 MA's), (2, 5088), (4, 5163), (5, 5181), (7, 5193), (15, 5256), (19, 5265), (21, 5301), (23, 5334), (24, 5337), (28, 5421), (29, 5424), (36, 5514), (39, 5535), (40, 5538), (43, 5586), (45, 5622), (56, 5763), (57, 5769), (63, 5889), (72, 5946), (79, 6030), (82, 6048), (84, 6111), (85, 6114), (86, 6117), (87, 6141), (88, 6165), (89, 6171), (93, 6234), (100, 6294), (110, 6372), (113, 6402), (118, 6450),

Gene: PhriskyACE\_28 Start: 23262, Stop: 24551, Start Num: 9

Candidate Starts for PhriskyACE\_28:

(9, 23262), (11, 23271), (31, 23475), (33, 23523), (35, 23541), (41, 23574), (44, 23628), (46, 23661), (48, 23682), (52, 23718), (54, 23754), (60, 23880), (64, 23937), (67, 23949), (68, 23958), (71, 23988), (75, 24030), (78, 24066), (80, 24075), (85, 24150), (86, 24153), (91, 24234), (92, 24246), (103, 24372), (105, 24414), (106, 24423), (107, 24426), (108, 24429), (112, 24477), (114, 24483),

Gene: Pine5\_21 Start: 16580, Stop: 17845, Start Num: 6

Candidate Starts for Pine5\_21:

(3, 16523), (6, 16580), (20, 16664), (25, 16757), (27, 16811), (28, 16823), (32, 16889), (33, 16892), (43, 16976), (55, 17123), (58, 17177), (59, 17180), (62, 17261), (64, 17273), (69, 17297), (92, 17555), (98, 17657), (100, 17669), (104, 17714),

Gene: Ranch\_5 Start: 3845, Stop: 5074, Start Num: 8

Candidate Starts for Ranch\_5:

(Start: 8 @3845 has 1 MA's), (13, 3866), (18, 3896), (27, 4040), (28, 4052), (31, 4073), (33, 4121), (47, 4268), (49, 4274), (50, 4277), (53, 4334), (55, 4355), (59, 4412), (61, 4490), (62, 4493), (64, 4505), (65, 4508), (69, 4529), (74, 4592), (83, 4667), (86, 4712), (90, 4772), (94, 4850), (95, 4853), (96, 4868), (97, 4883), (102, 4904),