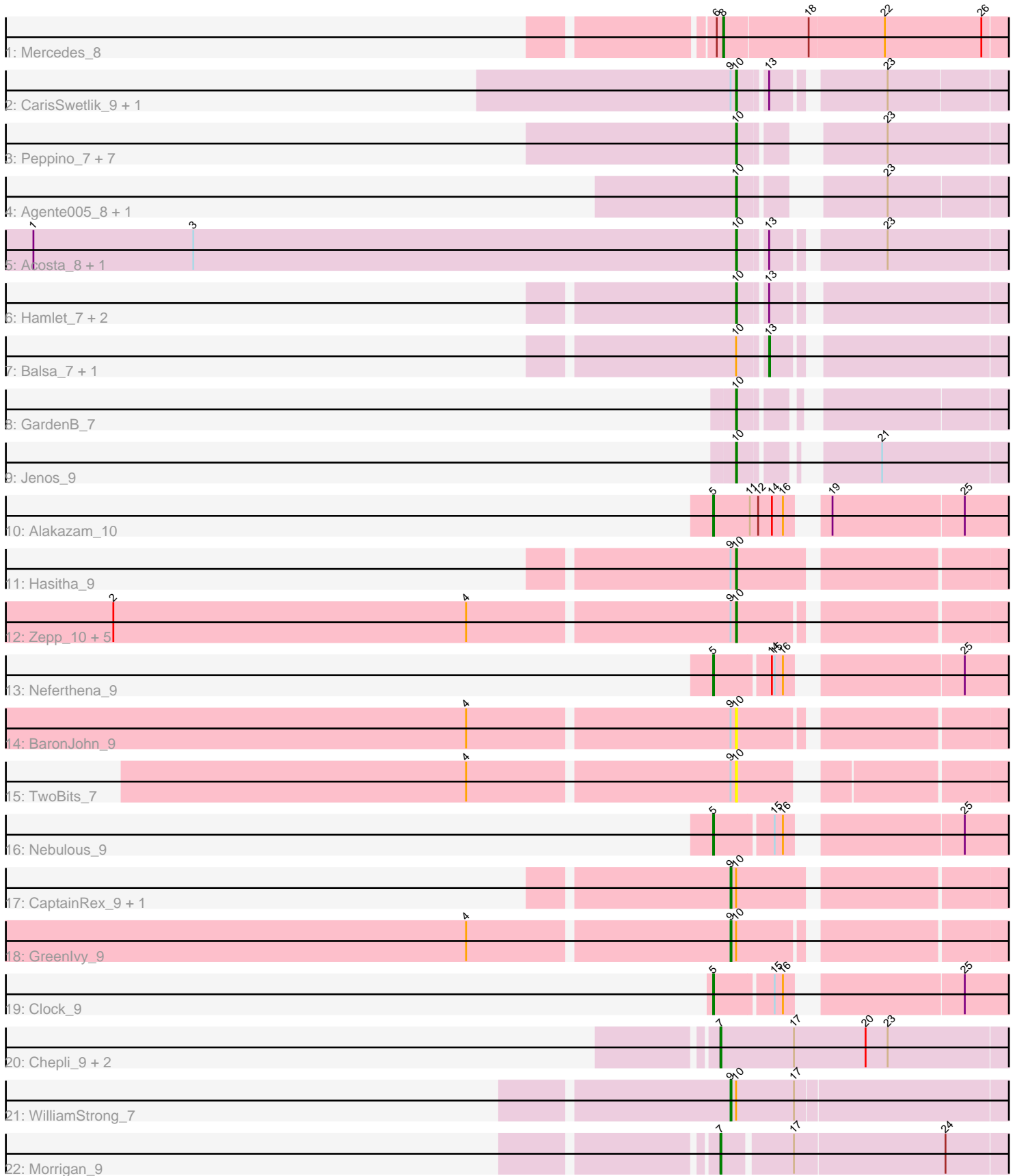


Pham 224701



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 224701 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224701 has 43 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Mercedes_8
- Track 2 : CarisSwetlik_9, McGalleon_8
- Track 3 : Peppino_7, Etna_7, Redfield_7, BeeBee8_8, Stormbreaker8_7, Leafus_7, Schnapsidee_7, KingJulien_7
- Track 4 : Agente005_8, Anilorac_7
- Track 5 : Acosta_8, JasonD_9
- Track 6 : Hamlet_7, FarmerDoug_7, Endor_8
- Track 7 : Balsa_7, Raccoon_7
- Track 8 : GardenB_7
- Track 9 : Jenos_9
- Track 10 : Alakazam_10
- Track 11 : Hasitha_9
- Track 12 : Zepp_10, QuadZero_9, Zayuliv_9, LilTerminator_9, Fulton_9, Wardwill_10
- Track 13 : Neferthena_9
- Track 14 : BaronJohn_9
- Track 15 : TwoBits_7
- Track 16 : Nebulous_9
- Track 17 : CaptainRex_9, Librie_9
- Track 18 : Greenlvy_9
- Track 19 : Clock_9
- Track 20 : Chepli_9, KatChan_9, Luna18_9
- Track 21 : WilliamStrong_7
- Track 22 : Morigan_9

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 20 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acosta_8, Agente005_8, Anilorac_7, BaronJohn_9, BeeBee8_8, CarisSwetlik_9, Endor_8, Etna_7, FarmerDoug_7, Fulton_9, GardenB_7, Hamlet_7, Hasitha_9, JasonD_9, Jenos_9, KingJulien_7, Leafus_7, LilTerminator_9, McGalleon_8,

Peppino_7, QuadZero_9, Redfield_7, Schnapsidee_7, Stormbreaker8_7, TwoBits_7, Wardwill_10, Zayuliv_9, Zepp_10,

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

- Balsa_7, CaptainRex_9, GreenIvy_9, Librie_9, Raccoon_7, WilliamStrong_7,

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

- Alakazam_10, Chepli_9, Clock_9, KatChan_9, Luna18_9, Mercedes_8, Morrigan_9, Nebulous_9, Neferthena_9,

Summary by start number:

Start 5:

- Found in 4 of 43 (9.3%) of genes in pham
- Manual Annotations of this start: 4 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alakazam_10 (EA5), Clock_9 (EA5), Nebulous_9 (EA5), Neferthena_9 (EA5),

Start 7:

- Found in 4 of 43 (9.3%) of genes in pham
- Manual Annotations of this start: 4 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chepli_9 (EA6), KatChan_9 (EA6), Luna18_9 (EA6), Morrigan_9 (EA6),

Start 8:

- Found in 1 of 43 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mercedes_8 (EA),

Start 9:

- Found in 15 of 43 (34.9%) of genes in pham
- Manual Annotations of this start: 4 of 35
- Called 26.7% of time when present
- Phage (with cluster) where this start called: CaptainRex_9 (EA5), GreenIvy_9 (EA5), Librie_9 (EA5), WilliamStrong_7 (EA6),

Start 10:

- Found in 34 of 43 (79.1%) of genes in pham
- Manual Annotations of this start: 20 of 35
- Called 82.4% of time when present
- Phage (with cluster) where this start called: Acosta_8 (EA1), Agente005_8 (EA1), Anilorac_7 (EA1), BaronJohn_9 (EA5), BeeBee8_8 (EA1), CarisSwetlik_9 (EA1), Endor_8 (EA1), Etna_7 (EA1), FarmerDoug_7 (EA1), Fulton_9 (EA5), GardenB_7 (EA1), Hamlet_7 (EA1), Hasitha_9 (EA5), JasonD_9 (EA1), Jenos_9 (EA1), KingJulien_7 (EA1), Leafus_7 (EA1), LilTerminator_9 (EA5), McGalleon_8 (EA1), Peppino_7 (EA1), QuadZero_9 (EA5), Redfield_7 (EA1), Schnapsidee_7 (EA1), Stormbreaker8_7 (EA1), TwoBits_7 (EA5), Wardwill_10 (EA5), Zayuliv_9 (EA5), Zepp_10 (EA5),

Start 13:

- Found in 9 of 43 (20.9%) of genes in pham
- Manual Annotations of this start: 2 of 35
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Balsa_7 (EA1), Raccoon_7 (EA1),

Summary by clusters:

There are 4 clusters represented in this pham: EA1, EA, EA5, EA6,

Info for manual annotations of cluster EA:

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

Info for manual annotations of cluster EA1:

- Start number 10 was manually annotated 15 times for cluster EA1.
- Start number 13 was manually annotated 2 times for cluster EA1.

Info for manual annotations of cluster EA5:

- Start number 5 was manually annotated 4 times for cluster EA5.
- Start number 9 was manually annotated 3 times for cluster EA5.
- Start number 10 was manually annotated 5 times for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 7 was manually annotated 4 times for cluster EA6.
- Start number 9 was manually annotated 1 time for cluster EA6.

Gene Information:

Gene: Acosta_8 Start: 5822, Stop: 6115, Start Num: 10

Candidate Starts for Acosta_8:

(1, 5057), (3, 5231), (Start: 10 @5822 has 20 MA's), (Start: 13 @5849 has 2 MA's), (23, 5954),

Gene: Agente005_8 Start: 5865, Stop: 6137, Start Num: 10

Candidate Starts for Agente005_8:

(Start: 10 @5865 has 20 MA's), (23, 5982),

Gene: Alakazam_10 Start: 6949, Stop: 7263, Start Num: 5

Candidate Starts for Alakazam_10:

(Start: 5 @6949 has 4 MA's), (11, 6988), (12, 6997), (14, 7012), (16, 7024), (19, 7048), (25, 7189),

Gene: Anilorac_7 Start: 5708, Stop: 5980, Start Num: 10

Candidate Starts for Anilorac_7:

(Start: 10 @5708 has 20 MA's), (23, 5825),

Gene: Balsa_7 Start: 5724, Stop: 5981, Start Num: 13

Candidate Starts for Balsa_7:

(Start: 10 @5697 has 20 MA's), (Start: 13 @5724 has 2 MA's),

Gene: BaronJohn_9 Start: 6171, Stop: 6461, Start Num: 10

Candidate Starts for BaronJohn_9:

(4, 5889), (Start: 9 @6165 has 4 MA's), (Start: 10 @6171 has 20 MA's),

Gene: BeeBee8_8 Start: 5875, Stop: 6147, Start Num: 10

Candidate Starts for BeeBee8_8:

(Start: 10 @5875 has 20 MA's), (23, 5992),

Gene: CaptainRex_9 Start: 6162, Stop: 6464, Start Num: 9

Candidate Starts for CaptainRex_9:

(Start: 9 @6162 has 4 MA's), (Start: 10 @6168 has 20 MA's),

Gene: CarisSwetlik_9 Start: 6313, Stop: 6603, Start Num: 10

Candidate Starts for CarisSwetlik_9:

(Start: 9 @6307 has 4 MA's), (Start: 10 @6313 has 20 MA's), (Start: 13 @6340 has 2 MA's), (23, 6445),

Gene: Chepli_9 Start: 6131, Stop: 6466, Start Num: 7

Candidate Starts for Chepli_9:

(Start: 7 @6131 has 4 MA's), (17, 6209), (20, 6287), (23, 6311),

Gene: Clock_9 Start: 6887, Stop: 7195, Start Num: 5

Candidate Starts for Clock_9:

(Start: 5 @6887 has 4 MA's), (15, 6947), (16, 6956), (25, 7121),

Gene: Endor_8 Start: 6106, Stop: 6390, Start Num: 10

Candidate Starts for Endor_8:

(Start: 10 @6106 has 20 MA's), (Start: 13 @6133 has 2 MA's),

Gene: Etna_7 Start: 5700, Stop: 5972, Start Num: 10

Candidate Starts for Etna_7:

(Start: 10 @5700 has 20 MA's), (23, 5817),

Gene: FarmerDoug_7 Start: 5691, Stop: 5975, Start Num: 10

Candidate Starts for FarmerDoug_7:

(Start: 10 @5691 has 20 MA's), (Start: 13 @5718 has 2 MA's),

Gene: Fulton_9 Start: 6156, Stop: 6446, Start Num: 10

Candidate Starts for Fulton_9:

(2, 5490), (4, 5874), (Start: 9 @6150 has 4 MA's), (Start: 10 @6156 has 20 MA's),

Gene: GardenB_7 Start: 5706, Stop: 5987, Start Num: 10

Candidate Starts for GardenB_7:

(Start: 10 @5706 has 20 MA's),

Gene: Greenlvy_9 Start: 6165, Stop: 6461, Start Num: 9

Candidate Starts for Greenlvy_9:

(4, 5889), (Start: 9 @6165 has 4 MA's), (Start: 10 @6171 has 20 MA's),

Gene: Hamlet_7 Start: 5697, Stop: 5981, Start Num: 10

Candidate Starts for Hamlet_7:

(Start: 10 @5697 has 20 MA's), (Start: 13 @5724 has 2 MA's),

Gene: Hasitha_9 Start: 6168, Stop: 6464, Start Num: 10

Candidate Starts for Hasitha_9:

(Start: 9 @6162 has 4 MA's), (Start: 10 @6168 has 20 MA's),

Gene: JasonD_9 Start: 5980, Stop: 6270, Start Num: 10
Candidate Starts for JasonD_9:
(1, 5215), (3, 5389), (Start: 10 @5980 has 20 MA's), (Start: 13 @6007 has 2 MA's), (23, 6112),

Gene: Jenos_9 Start: 6313, Stop: 6594, Start Num: 10
Candidate Starts for Jenos_9:
(Start: 10 @6313 has 20 MA's), (21, 6427),

Gene: KatChan_9 Start: 6137, Stop: 6472, Start Num: 7
Candidate Starts for KatChan_9:
(Start: 7 @6137 has 4 MA's), (17, 6215), (20, 6293), (23, 6317),

Gene: KingJulien_7 Start: 5700, Stop: 5972, Start Num: 10
Candidate Starts for KingJulien_7:
(Start: 10 @5700 has 20 MA's), (23, 5817),

Gene: Leafus_7 Start: 5847, Stop: 6119, Start Num: 10
Candidate Starts for Leafus_7:
(Start: 10 @5847 has 20 MA's), (23, 5964),

Gene: Librie_9 Start: 6162, Stop: 6464, Start Num: 9
Candidate Starts for Librie_9:
(Start: 9 @6162 has 4 MA's), (Start: 10 @6168 has 20 MA's),

Gene: LilTerminator_9 Start: 6180, Stop: 6470, Start Num: 10
Candidate Starts for LilTerminator_9:
(2, 5514), (4, 5898), (Start: 9 @6174 has 4 MA's), (Start: 10 @6180 has 20 MA's),

Gene: Luna18_9 Start: 6137, Stop: 6472, Start Num: 7
Candidate Starts for Luna18_9:
(Start: 7 @6137 has 4 MA's), (17, 6215), (20, 6293), (23, 6317),

Gene: McGalleon_8 Start: 6417, Stop: 6707, Start Num: 10
Candidate Starts for McGalleon_8:
(Start: 9 @6411 has 4 MA's), (Start: 10 @6417 has 20 MA's), (Start: 13 @6444 has 2 MA's), (23, 6549),

Gene: Mercedes_8 Start: 5895, Stop: 6221, Start Num: 8
Candidate Starts for Mercedes_8:
(6, 5889), (Start: 8 @5895 has 1 MA's), (18, 5982), (22, 6063), (26, 6168),

Gene: Morrigan_9 Start: 7044, Stop: 7370, Start Num: 7
Candidate Starts for Morrigan_9:
(Start: 7 @7044 has 4 MA's), (17, 7113), (24, 7275),

Gene: Nebulous_9 Start: 6896, Stop: 7204, Start Num: 5
Candidate Starts for Nebulous_9:
(Start: 5 @6896 has 4 MA's), (15, 6956), (16, 6965), (25, 7130),

Gene: Neferthena_9 Start: 6907, Stop: 7215, Start Num: 5
Candidate Starts for Neferthena_9:
(Start: 5 @6907 has 4 MA's), (14, 6964), (15, 6967), (16, 6976), (25, 7141),

Gene: Peppino_7 Start: 5700, Stop: 5972, Start Num: 10

Candidate Starts for Peppino_7:

(Start: 10 @5700 has 20 MA's), (23, 5817),

Gene: QuadZero_9 Start: 6180, Stop: 6476, Start Num: 10

Candidate Starts for QuadZero_9:

(2, 5514), (4, 5898), (Start: 9 @6174 has 4 MA's), (Start: 10 @6180 has 20 MA's),

Gene: Raccoon_7 Start: 5721, Stop: 5978, Start Num: 13

Candidate Starts for Raccoon_7:

(Start: 10 @5694 has 20 MA's), (Start: 13 @5721 has 2 MA's),

Gene: Redfield_7 Start: 5708, Stop: 5980, Start Num: 10

Candidate Starts for Redfield_7:

(Start: 10 @5708 has 20 MA's), (23, 5825),

Gene: Schnapsidee_7 Start: 5699, Stop: 5971, Start Num: 10

Candidate Starts for Schnapsidee_7:

(Start: 10 @5699 has 20 MA's), (23, 5816),

Gene: Stormbreaker8_7 Start: 5700, Stop: 5972, Start Num: 10

Candidate Starts for Stormbreaker8_7:

(Start: 10 @5700 has 20 MA's), (23, 5817),

Gene: TwoBits_7 Start: 5981, Stop: 6259, Start Num: 10

Candidate Starts for TwoBits_7:

(4, 5699), (Start: 9 @5975 has 4 MA's), (Start: 10 @5981 has 20 MA's),

Gene: Wardwill_10 Start: 6342, Stop: 6632, Start Num: 10

Candidate Starts for Wardwill_10:

(2, 5676), (4, 6060), (Start: 9 @6336 has 4 MA's), (Start: 10 @6342 has 20 MA's),

Gene: WilliamStrong_7 Start: 6746, Stop: 7072, Start Num: 9

Candidate Starts for WilliamStrong_7:

(Start: 9 @6746 has 4 MA's), (Start: 10 @6752 has 20 MA's), (17, 6815),

Gene: Zayuliv_9 Start: 6156, Stop: 6452, Start Num: 10

Candidate Starts for Zayuliv_9:

(2, 5490), (4, 5874), (Start: 9 @6150 has 4 MA's), (Start: 10 @6156 has 20 MA's),

Gene: Zepp_10 Start: 6171, Stop: 6461, Start Num: 10

Candidate Starts for Zepp_10:

(2, 5505), (4, 5889), (Start: 9 @6165 has 4 MA's), (Start: 10 @6171 has 20 MA's),