



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 221520 Report

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

Pham number 221520 has 48 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Bartimeaus_71, Commander_69, LappelDuVide_71, Lemur_71, Sparxx_72
- Track 2 : Wander_71, Cocoaberry_71, Iracema64_71, Houdini22_70, NotAPhaseMom_70, Funston_70, Avle17_71, Maverick_70, Eris_70, JoongJeon_70, Phacado_71, Palestino_70
- Track 3 : Ruin_71, Caelakin_70, Dhanush_71, Peaches_69, HamSlice_67, Burger_69, Annyong_70, Broseidon_71
- Track 4 : Abdiel_71, Thanksgivukkah_70, Clarenza_70, BubbleTrouble_70, Eapen_71, Kratark_70, Bombshell_71, Bruiser_70, Millski_70, KFPoly_70
- Track 5 : LittleGuy_71, ICleared_70, Nyxis_70
- Track 6 : Romney_70, Wilbur_71, Medusa_71, Druantia_70, Melvin_73, TinaFeyge_69, Blackmoor_70
- Track 7 : MeeZee_70, Gadost_71
- Track 8 : Morrow_73

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

The start number called the most often in the published annotations is 3, it was called in 30 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abdiel_71, Avle17_71, Bartimeaus_71, Bombshell_71, Bruiser_70, BubbleTrouble_70, Clarenza_70, Cocoaberry_71, Commander_69, Eapen_71, Eris_70, Funston_70, Houdini22_70, ICleared_70, Iracema64_71, JoongJeon_70, KFPoly_70, Kratark_70, LappelDuVide_71, Lemur_71, LittleGuy_71, Maverick_70, Millski_70, NotAPhaseMom_70, Nyxis_70, Palestino_70, Phacado_71, Sparxx_72, Thanksgivukkah_70, Wander_71,

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

- Annyong_70, Blackmoor_70, Broseidon_71, Burger_69, Caelakin_70, Dhanush_71, Druantia_70, Gadost_71, HamSlice_67, Medusa_71, MeeZee_70, Melvin_73, Morrow_73, Peaches_69, Romney_70, Ruin_71, TinaFeyge_69, Wilbur_71,

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

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Summary by start number:

Start 3:

- Found in 48 of 48 (100.0%) of genes in pham
- Manual Annotations of this start: 30 of 48
- Called 62.5% of time when present
- Phage (with cluster) where this start called: Abdiel_71 (A4), Avle17_71 (A4), Bartimeaus_71 (A4), Bombshell_71 (A4), Bruiser_70 (A4), BubbleTrouble_70 (A4), Clarenza_70 (A4), Cocoaberry_71 (A4), Commander_69 (A4), Eapen_71 (A4), Eris_70 (A4), Funston_70 (A4), Houdini22_70 (A4), ICleared_70 (A4), Iracema64_71 (A4), JoongJeon_70 (A4), KFPoly_70 (A4), Kratak_70 (A4), LappelDuVide_71 (A4), Lemur_71 (A4), LittleGuy_71 (A4), Maverick_70 (A4), Millski_70 (A4), NotAPhaseMom_70 (A4), Nyxis_70 (A4), Palestino_70 (A4), Phacado_71 (A4), Sparxx_72 (A4), Thanksgivukkah_70 (A4), Wander_71 (A4),

Start 4:

- Found in 48 of 48 (100.0%) of genes in pham
- Manual Annotations of this start: 18 of 48
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Annyong_70 (A4), Blackmoor_70 (A4), Broseidon_71 (A4), Burger_69 (A4), Caelakin_70 (A4), Dhanush_71 (A4), Druantia_70 (A4), Gadost_71 (A4), HamSlice_67 (A4), Medusa_71 (A4), MeeZee_70 (A4), Melvin_73 (A4), Morrow_73 (A4), Peaches_69 (A4), Romney_70 (A4), Ruin_71 (A4), TinaFeyge_69 (A4), Wilbur_71 (A4),

Summary by clusters:

There is one cluster represented in this pham: A4

Info for manual annotations of cluster A4:

- Start number 3 was manually annotated 30 times for cluster A4.
- Start number 4 was manually annotated 18 times for cluster A4.

Gene Information:

Gene: Abdiel_71 Start: 44630, Stop: 44394, Start Num: 3

Candidate Starts for Abdiel_71:

(1, 44756), (Start: 3 @44630 has 30 MA's), (Start: 4 @44621 has 18 MA's), (6, 44528), (7, 44522), (8, 44507), (9, 44501), (11, 44441),

Gene: Annyong_70 Start: 44654, Stop: 44427, Start Num: 4

Candidate Starts for Annyong_70:

(1, 44789), (Start: 3 @44663 has 30 MA's), (Start: 4 @44654 has 18 MA's), (6, 44561), (7, 44555), (8, 44540), (9, 44534), (11, 44474),

Gene: Avle17_71 Start: 44612, Stop: 44376, Start Num: 3

Candidate Starts for Avle17_71:

(2, 44666), (Start: 3 @44612 has 30 MA's), (Start: 4 @44603 has 18 MA's), (6, 44510), (7, 44504), (8, 44489), (9, 44483), (11, 44423),

Gene: Bartimeaus_71 Start: 44620, Stop: 44384, Start Num: 3

Candidate Starts for Bartimeaus_71:

(Start: 3 @44620 has 30 MA's), (Start: 4 @44611 has 18 MA's), (6, 44518), (7, 44512), (8, 44497), (9, 44491), (11, 44431),

Gene: Blackmoor_70 Start: 44611, Stop: 44384, Start Num: 4

Candidate Starts for Blackmoor_70:

(Start: 3 @44620 has 30 MA's), (Start: 4 @44611 has 18 MA's), (6, 44518), (7, 44512), (8, 44497), (9, 44491), (11, 44431),

Gene: Bombshell_71 Start: 44615, Stop: 44379, Start Num: 3

Candidate Starts for Bombshell_71:

(1, 44741), (Start: 3 @44615 has 30 MA's), (Start: 4 @44606 has 18 MA's), (6, 44513), (7, 44507), (8, 44492), (9, 44486), (11, 44426),

Gene: Broseidon_71 Start: 44612, Stop: 44385, Start Num: 4

Candidate Starts for Broseidon_71:

(1, 44747), (Start: 3 @44621 has 30 MA's), (Start: 4 @44612 has 18 MA's), (6, 44519), (7, 44513), (8, 44498), (9, 44492), (11, 44432),

Gene: Bruiser_70 Start: 44618, Stop: 44382, Start Num: 3

Candidate Starts for Bruiser_70:

(1, 44744), (Start: 3 @44618 has 30 MA's), (Start: 4 @44609 has 18 MA's), (6, 44516), (7, 44510), (8, 44495), (9, 44489), (11, 44429),

Gene: BubbleTrouble_70 Start: 44645, Stop: 44409, Start Num: 3

Candidate Starts for BubbleTrouble_70:

(1, 44771), (Start: 3 @44645 has 30 MA's), (Start: 4 @44636 has 18 MA's), (6, 44543), (7, 44537), (8, 44522), (9, 44516), (11, 44456),

Gene: Burger_69 Start: 44609, Stop: 44382, Start Num: 4

Candidate Starts for Burger_69:

(1, 44744), (Start: 3 @44618 has 30 MA's), (Start: 4 @44609 has 18 MA's), (6, 44516), (7, 44510), (8, 44495), (9, 44489), (11, 44429),

Gene: Caelakin_70 Start: 44609, Stop: 44382, Start Num: 4

Candidate Starts for Caelakin_70:

(1, 44744), (Start: 3 @44618 has 30 MA's), (Start: 4 @44609 has 18 MA's), (6, 44516), (7, 44510), (8, 44495), (9, 44489), (11, 44429),

Gene: Clarenza_70 Start: 44615, Stop: 44379, Start Num: 3

Candidate Starts for Clarenza_70:

(1, 44741), (Start: 3 @44615 has 30 MA's), (Start: 4 @44606 has 18 MA's), (6, 44513), (7, 44507), (8, 44492), (9, 44486), (11, 44426),

Gene: Cocoaberry_71 Start: 44619, Stop: 44383, Start Num: 3

Candidate Starts for Cocoaberry_71:

(2, 44673), (Start: 3 @44619 has 30 MA's), (Start: 4 @44610 has 18 MA's), (6, 44517), (7, 44511), (8, 44496), (9, 44490), (11, 44430),

Gene: Commander_69 Start: 44616, Stop: 44380, Start Num: 3

Candidate Starts for Commander_69:

(Start: 3 @44616 has 30 MA's), (Start: 4 @44607 has 18 MA's), (6, 44514), (7, 44508), (8, 44493), (9, 44487), (11, 44427),

Gene: Dhanush_71 Start: 44612, Stop: 44385, Start Num: 4

Candidate Starts for Dhanush_71:

(1, 44747), (Start: 3 @44621 has 30 MA's), (Start: 4 @44612 has 18 MA's), (6, 44519), (7, 44513), (8, 44498), (9, 44492), (11, 44432),

Gene: Druantia_70 Start: 44612, Stop: 44385, Start Num: 4

Candidate Starts for Druantia_70:

(Start: 3 @44621 has 30 MA's), (Start: 4 @44612 has 18 MA's), (6, 44519), (7, 44513), (8, 44498), (9, 44492), (11, 44432),

Gene: Eapen_71 Start: 44613, Stop: 44377, Start Num: 3

Candidate Starts for Eapen_71:

(1, 44739), (Start: 3 @44613 has 30 MA's), (Start: 4 @44604 has 18 MA's), (6, 44511), (7, 44505), (8, 44490), (9, 44484), (11, 44424),

Gene: Eris_70 Start: 44630, Stop: 44394, Start Num: 3

Candidate Starts for Eris_70:

(2, 44684), (Start: 3 @44630 has 30 MA's), (Start: 4 @44621 has 18 MA's), (6, 44528), (7, 44522), (8, 44507), (9, 44501), (11, 44441),

Gene: Funston_70 Start: 44615, Stop: 44379, Start Num: 3

Candidate Starts for Funston_70:

(2, 44669), (Start: 3 @44615 has 30 MA's), (Start: 4 @44606 has 18 MA's), (6, 44513), (7, 44507), (8, 44492), (9, 44486), (11, 44426),

Gene: Gadost_71 Start: 44610, Stop: 44383, Start Num: 4

Candidate Starts for Gadost_71:

(2, 44673), (Start: 3 @44619 has 30 MA's), (Start: 4 @44610 has 18 MA's), (6, 44517), (7, 44511), (8, 44496), (9, 44490), (11, 44430),

Gene: HamSlice_67 Start: 44608, Stop: 44381, Start Num: 4

Candidate Starts for HamSlice_67:

(1, 44743), (Start: 3 @44617 has 30 MA's), (Start: 4 @44608 has 18 MA's), (6, 44515), (7, 44509), (8, 44494), (9, 44488), (11, 44428),

Gene: Houdini22_70 Start: 44619, Stop: 44383, Start Num: 3

Candidate Starts for Houdini22_70:

(2, 44673), (Start: 3 @44619 has 30 MA's), (Start: 4 @44610 has 18 MA's), (6, 44517), (7, 44511), (8, 44496), (9, 44490), (11, 44430),

Gene: ICleared_70 Start: 44686, Stop: 44450, Start Num: 3

Candidate Starts for ICleared_70:

(Start: 3 @44686 has 30 MA's), (Start: 4 @44677 has 18 MA's), (5, 44671), (6, 44584), (7, 44578), (8, 44563), (9, 44557), (11, 44497),

Gene: Iracema64_71 Start: 44882, Stop: 44646, Start Num: 3

Candidate Starts for Iracema64_71:

(2, 44936), (Start: 3 @44882 has 30 MA's), (Start: 4 @44873 has 18 MA's), (6, 44780), (7, 44774), (8, 44759), (9, 44753), (11, 44693),

Gene: JoongJeon_70 Start: 44612, Stop: 44376, Start Num: 3

Candidate Starts for JoongJeon_70:

(2, 44666), (Start: 3 @44612 has 30 MA's), (Start: 4 @44603 has 18 MA's), (6, 44510), (7, 44504), (8, 44489), (9, 44483), (11, 44423),

Gene: KFPoly_70 Start: 44612, Stop: 44376, Start Num: 3

Candidate Starts for KFPoly_70:

(1, 44738), (Start: 3 @44612 has 30 MA's), (Start: 4 @44603 has 18 MA's), (6, 44510), (7, 44504), (8, 44489), (9, 44483), (11, 44423),

Gene: Kratark_70 Start: 44652, Stop: 44416, Start Num: 3

Candidate Starts for Kratark_70:

(1, 44778), (Start: 3 @44652 has 30 MA's), (Start: 4 @44643 has 18 MA's), (6, 44550), (7, 44544), (8, 44529), (9, 44523), (11, 44463),

Gene: LappelDuVide_71 Start: 44617, Stop: 44381, Start Num: 3

Candidate Starts for LappelDuVide_71:

(Start: 3 @44617 has 30 MA's), (Start: 4 @44608 has 18 MA's), (6, 44515), (7, 44509), (8, 44494), (9, 44488), (11, 44428),

Gene: Lemur_71 Start: 44615, Stop: 44379, Start Num: 3

Candidate Starts for Lemur_71:

(Start: 3 @44615 has 30 MA's), (Start: 4 @44606 has 18 MA's), (6, 44513), (7, 44507), (8, 44492), (9, 44486), (11, 44426),

Gene: LittleGuy_71 Start: 44503, Stop: 44267, Start Num: 3

Candidate Starts for LittleGuy_71:

(Start: 3 @44503 has 30 MA's), (Start: 4 @44494 has 18 MA's), (5, 44488), (6, 44401), (7, 44395), (8, 44380), (9, 44374), (11, 44314),

Gene: Maverick_70 Start: 44615, Stop: 44379, Start Num: 3

Candidate Starts for Maverick_70:

(2, 44669), (Start: 3 @44615 has 30 MA's), (Start: 4 @44606 has 18 MA's), (6, 44513), (7, 44507), (8, 44492), (9, 44486), (11, 44426),

Gene: Medusa_71 Start: 44622, Stop: 44395, Start Num: 4

Candidate Starts for Medusa_71:

(Start: 3 @44631 has 30 MA's), (Start: 4 @44622 has 18 MA's), (6, 44529), (7, 44523), (8, 44508), (9, 44502), (11, 44442),

Gene: MeeZee_70 Start: 44603, Stop: 44376, Start Num: 4

Candidate Starts for MeeZee_70:

(2, 44666), (Start: 3 @44612 has 30 MA's), (Start: 4 @44603 has 18 MA's), (6, 44510), (7, 44504), (8, 44489), (9, 44483), (11, 44423),

Gene: Melvin_73 Start: 44604, Stop: 44377, Start Num: 4

Candidate Starts for Melvin_73:

(Start: 3 @44613 has 30 MA's), (Start: 4 @44604 has 18 MA's), (6, 44511), (7, 44505), (8, 44490), (9, 44484), (11, 44424),

Gene: Millski_70 Start: 44619, Stop: 44383, Start Num: 3

Candidate Starts for Millski_70:

(1, 44745), (Start: 3 @44619 has 30 MA's), (Start: 4 @44610 has 18 MA's), (6, 44517), (7, 44511), (8, 44496), (9, 44490), (11, 44430),

Gene: Morrow_73 Start: 44649, Stop: 44422, Start Num: 4

Candidate Starts for Morrow_73:

(1, 44784), (Start: 3 @44658 has 30 MA's), (Start: 4 @44649 has 18 MA's), (6, 44556), (7, 44550), (8, 44535), (9, 44529), (10, 44472), (11, 44469),

Gene: NotAPhaseMom_70 Start: 44619, Stop: 44383, Start Num: 3

Candidate Starts for NotAPhaseMom_70:

(2, 44673), (Start: 3 @44619 has 30 MA's), (Start: 4 @44610 has 18 MA's), (6, 44517), (7, 44511), (8, 44496), (9, 44490), (11, 44430),

Gene: Nyxis_70 Start: 44497, Stop: 44261, Start Num: 3

Candidate Starts for Nyxis_70:

(Start: 3 @44497 has 30 MA's), (Start: 4 @44488 has 18 MA's), (5, 44482), (6, 44395), (7, 44389), (8, 44374), (9, 44368), (11, 44308),

Gene: Palestino_70 Start: 44615, Stop: 44379, Start Num: 3

Candidate Starts for Palestino_70:

(2, 44669), (Start: 3 @44615 has 30 MA's), (Start: 4 @44606 has 18 MA's), (6, 44513), (7, 44507), (8, 44492), (9, 44486), (11, 44426),

Gene: Peaches_69 Start: 44608, Stop: 44381, Start Num: 4

Candidate Starts for Peaches_69:

(1, 44743), (Start: 3 @44617 has 30 MA's), (Start: 4 @44608 has 18 MA's), (6, 44515), (7, 44509), (8, 44494), (9, 44488), (11, 44428),

Gene: Phacado_71 Start: 44614, Stop: 44378, Start Num: 3

Candidate Starts for Phacado_71:

(2, 44668), (Start: 3 @44614 has 30 MA's), (Start: 4 @44605 has 18 MA's), (6, 44512), (7, 44506), (8, 44491), (9, 44485), (11, 44425),

Gene: Romney_70 Start: 44606, Stop: 44379, Start Num: 4

Candidate Starts for Romney_70:

(Start: 3 @44615 has 30 MA's), (Start: 4 @44606 has 18 MA's), (6, 44513), (7, 44507), (8, 44492), (9, 44486), (11, 44426),

Gene: Ruin_71 Start: 44602, Stop: 44375, Start Num: 4

Candidate Starts for Ruin_71:

(1, 44737), (Start: 3 @44611 has 30 MA's), (Start: 4 @44602 has 18 MA's), (6, 44509), (7, 44503), (8, 44488), (9, 44482), (11, 44422),

Gene: Sparxx_72 Start: 44614, Stop: 44378, Start Num: 3

Candidate Starts for Sparxx_72:

(Start: 3 @44614 has 30 MA's), (Start: 4 @44605 has 18 MA's), (6, 44512), (7, 44506), (8, 44491), (9, 44485), (11, 44425),

Gene: Thanksgivukkah_70 Start: 44616, Stop: 44380, Start Num: 3

Candidate Starts for Thanksgivukkah_70:

(1, 44742), (Start: 3 @44616 has 30 MA's), (Start: 4 @44607 has 18 MA's), (6, 44514), (7, 44508), (8, 44493), (9, 44487), (11, 44427),

Gene: TinaFeyge_69 Start: 44604, Stop: 44377, Start Num: 4

Candidate Starts for TinaFeyge_69:

(Start: 3 @44613 has 30 MA's), (Start: 4 @44604 has 18 MA's), (6, 44511), (7, 44505), (8, 44490), (9, 44484), (11, 44424),

Gene: Wander_71 Start: 44612, Stop: 44376, Start Num: 3

Candidate Starts for Wander_71:

(2, 44666), (Start: 3 @44612 has 30 MA's), (Start: 4 @44603 has 18 MA's), (6, 44510), (7, 44504), (8, 44489), (9, 44483), (11, 44423),

Gene: Wilbur_71 Start: 44606, Stop: 44379, Start Num: 4

Candidate Starts for Wilbur_71:

(Start: 3 @44615 has 30 MA's), (Start: 4 @44606 has 18 MA's), (6, 44513), (7, 44507), (8, 44492), (9, 44486), (11, 44426),