



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 202990 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202990 has 54 members, 11 are drafts.

Phages represented in each track:

- Track 1 : KingKamren\_31
- Track 2 : EugeneKrabs\_32
- Track 3 : Zhengyi\_32
- Track 4 : Birdfeeder\_33, BlueRugrat\_34, Corn21\_34, DumpQuist\_34, SwissCheezer\_35, LesNorah\_35, Stormbreaker\_35, Unphazed\_35, LilyLou\_36, Alex44\_35, ArMaWen\_34, Dashyla\_34, Phogo\_35, Xitlalli\_33, TownLake\_34
- Track 5 : YellowPanda\_34, MiamiPanther\_33, TinyTimothy\_31, JessellCookie\_33, Wesak\_32
- Track 6 : Oatly\_36, TicTac\_36, Biozilla\_36, CrunchyBoi\_37, HitchHiker\_37, PineapplePluto\_37
- Track 7 : Pabst\_34
- Track 8 : Ashton\_35, Barroma\_33, Waterlily\_37, AloeVera\_35, Akoni\_34, ShyRosie\_36, Truong\_34, JordanFarm\_36
- Track 9 : Yafa\_34, ThirteenKH\_32, Atraxi\_32, TrippleS\_33, Morrill\_32
- Track 10 : Pharky\_34, Fullmetal\_34, Mazun\_35, Phedro\_34, PhriedRice\_35, StagePhright\_34, RicoCaldo\_34, Moleficient\_34, Astartes\_34, Phracted\_34
- Track 11 : Fede\_34

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

The start number called the most often in the published annotations is 5, it was called in 42 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akoni\_34, Alex44\_35, AloeVera\_35, ArMaWen\_34, Ashton\_35, Astartes\_34, Atraxi\_32, Barroma\_33, Biozilla\_36, Birdfeeder\_33, BlueRugrat\_34, Corn21\_34, CrunchyBoi\_37, Dashyla\_34, DumpQuist\_34, EugeneKrabs\_32, Fede\_34, Fullmetal\_34, HitchHiker\_37, JessellCookie\_33, JordanFarm\_36, KingKamren\_31, LesNorah\_35, LilyLou\_36, Mazun\_35, MiamiPanther\_33, Moleficient\_34, Morrill\_32, Oatly\_36, Pabst\_34, Pharky\_34, Phedro\_34, Phogo\_35, Phracted\_34, PhriedRice\_35, PineapplePluto\_37, RicoCaldo\_34, ShyRosie\_36, StagePhright\_34, Stormbreaker\_35, SwissCheezer\_35, ThirteenKH\_32, TicTac\_36, TinyTimothy\_31, TownLake\_34, TrippleS\_33, Truong\_34, Unphazed\_35, Waterlily\_37, Wesak\_32, Xitlalli\_33, Yafa\_34, YellowPanda\_34,

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

- Zhengyi\_32,

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

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

Start 2:

- Found in 3 of 54 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Zhengyi\_32 (EK),

Start 5:

- Found in 54 of 54 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 42 of 43
- Called 98.1% of time when present
- Phage (with cluster) where this start called: Akoni\_34 (EK2), Alex44\_35 (EK1), AloeVera\_35 (EK2), ArMaWen\_34 (EK1), Ashton\_35 (EK2), Astartes\_34 (EK2), Atraxi\_32 (EK2), Barroma\_33 (EK2), Biozilla\_36 (EK1), Birdfeeder\_33 (EK1), BlueRugrat\_34 (EK1), Corn21\_34 (EK1), CrunchyBoi\_37 (EK1), Dashyla\_34 (EK1), DumpQuist\_34 (EK1), EugeneKrabs\_32 (EK), Fede\_34 (EK2), Fullmetal\_34 (EK2), HitchHiker\_37 (EK1), JessellCookie\_33 (EK1), JordanFarm\_36 (EK2), KingKamren\_31 (EK), LesNorah\_35 (EK1), LilyLou\_36 (EK1), Mazun\_35 (EK2), MiamiPanther\_33 (EK1), Moleficient\_34 (EK2), Morrill\_32 (EK2), Oatly\_36 (EK1), Pabst\_34 (EK1), Pharky\_34 (EK2), Phedro\_34 (EK2), Phogo\_35 (EK1), Phractured\_34 (EK2), PhriedRice\_35 (EK2), PineapplePluto\_37 (EK1), RicoCaldo\_34 (EK2), ShyRosie\_36 (EK2), StagePhright\_34 (EK2), Stormbreaker\_35 (EK1), SwissCheezer\_35 (EK1), ThirteenKH\_32 (EK2), TicTac\_36 (EK1), TinyTimothy\_31 (EK1), TownLake\_34 (EK1), TrippleS\_33 (EK2), Truong\_34 (EK2), Unphazed\_35 (EK1), Waterlily\_37 (EK2), Wesak\_32 (EK1), Xitlalli\_33 (EK1), Yafa\_34 (EK2), YellowPanda\_34 (EK1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: EK, EK2, EK1,

Info for manual annotations of cluster EK:

- Start number 2 was manually annotated 1 time for cluster EK.
- Start number 5 was manually annotated 2 times for cluster EK.

Info for manual annotations of cluster EK1:

- Start number 5 was manually annotated 20 times for cluster EK1.

Info for manual annotations of cluster EK2:

- Start number 5 was manually annotated 20 times for cluster EK2.

### **Gene Information:**

Gene: Akoni\_34 Start: 35279, Stop: 35449, Start Num: 5  
Candidate Starts for Akoni\_34:  
(Start: 5 @35279 has 42 MA's), (6, 35348), (8, 35363),

Gene: Alex44\_35 Start: 35362, Stop: 35520, Start Num: 5  
Candidate Starts for Alex44\_35:  
(Start: 5 @35362 has 42 MA's),

Gene: AloeVera\_35 Start: 35493, Stop: 35663, Start Num: 5  
Candidate Starts for AloeVera\_35:  
(Start: 5 @35493 has 42 MA's), (6, 35562), (8, 35577),

Gene: ArMaWen\_34 Start: 34905, Stop: 35063, Start Num: 5  
Candidate Starts for ArMaWen\_34:  
(Start: 5 @34905 has 42 MA's),

Gene: Ashton\_35 Start: 35492, Stop: 35662, Start Num: 5  
Candidate Starts for Ashton\_35:  
(Start: 5 @35492 has 42 MA's), (6, 35561), (8, 35576),

Gene: Astartes\_34 Start: 35568, Stop: 35735, Start Num: 5  
Candidate Starts for Astartes\_34:  
(3, 35508), (4, 35511), (Start: 5 @35568 has 42 MA's), (6, 35637), (8, 35652),

Gene: Atraxi\_32 Start: 35359, Stop: 35526, Start Num: 5  
Candidate Starts for Atraxi\_32:  
(Start: 5 @35359 has 42 MA's), (6, 35428), (8, 35443),

Gene: Barroma\_33 Start: 35281, Stop: 35451, Start Num: 5  
Candidate Starts for Barroma\_33:  
(Start: 5 @35281 has 42 MA's), (6, 35350), (8, 35365),

Gene: Biozilla\_36 Start: 35410, Stop: 35574, Start Num: 5  
Candidate Starts for Biozilla\_36:  
(Start: 5 @35410 has 42 MA's), (7, 35482),

Gene: Birdfeeder\_33 Start: 35118, Stop: 35276, Start Num: 5  
Candidate Starts for Birdfeeder\_33:  
(Start: 5 @35118 has 42 MA's),

Gene: BlueRugrat\_34 Start: 35354, Stop: 35512, Start Num: 5  
Candidate Starts for BlueRugrat\_34:  
(Start: 5 @35354 has 42 MA's),

Gene: Corn21\_34 Start: 35432, Stop: 35590, Start Num: 5  
Candidate Starts for Corn21\_34:  
(Start: 5 @35432 has 42 MA's),

Gene: CrunchyBoi\_37 Start: 35265, Stop: 35429, Start Num: 5  
Candidate Starts for CrunchyBoi\_37:  
(Start: 5 @35265 has 42 MA's), (7, 35337),

Gene: Dashyla\_34 Start: 35036, Stop: 35194, Start Num: 5

Candidate Starts for Dashyla\_34:  
(Start: 5 @35036 has 42 MA's),

Gene: DumpQuist\_34 Start: 34890, Stop: 35048, Start Num: 5  
Candidate Starts for DumpQuist\_34:  
(Start: 5 @34890 has 42 MA's),

Gene: EugeneKrabs\_32 Start: 35491, Stop: 35652, Start Num: 5  
Candidate Starts for EugeneKrabs\_32:  
(1, 35422), (Start: 2 @35425 has 1 MA's), (Start: 5 @35491 has 42 MA's),

Gene: Fede\_34 Start: 34815, Stop: 34982, Start Num: 5  
Candidate Starts for Fede\_34:  
(Start: 5 @34815 has 42 MA's),

Gene: Fullmetal\_34 Start: 35428, Stop: 35595, Start Num: 5  
Candidate Starts for Fullmetal\_34:  
(3, 35368), (4, 35371), (Start: 5 @35428 has 42 MA's), (6, 35497), (8, 35512),

Gene: HitchHiker\_37 Start: 35410, Stop: 35574, Start Num: 5  
Candidate Starts for HitchHiker\_37:  
(Start: 5 @35410 has 42 MA's), (7, 35482),

Gene: JessellCookie\_33 Start: 34427, Stop: 34594, Start Num: 5  
Candidate Starts for JessellCookie\_33:  
(Start: 5 @34427 has 42 MA's),

Gene: JordanFarm\_36 Start: 35493, Stop: 35663, Start Num: 5  
Candidate Starts for JordanFarm\_36:  
(Start: 5 @35493 has 42 MA's), (6, 35562), (8, 35577),

Gene: KingKamren\_31 Start: 35452, Stop: 35613, Start Num: 5  
Candidate Starts for KingKamren\_31:  
(Start: 2 @35386 has 1 MA's), (Start: 5 @35452 has 42 MA's),

Gene: LesNorah\_35 Start: 35751, Stop: 35909, Start Num: 5  
Candidate Starts for LesNorah\_35:  
(Start: 5 @35751 has 42 MA's),

Gene: LilyLou\_36 Start: 35354, Stop: 35512, Start Num: 5  
Candidate Starts for LilyLou\_36:  
(Start: 5 @35354 has 42 MA's),

Gene: Mazun\_35 Start: 35750, Stop: 35917, Start Num: 5  
Candidate Starts for Mazun\_35:  
(3, 35690), (4, 35693), (Start: 5 @35750 has 42 MA's), (6, 35819), (8, 35834),

Gene: MiamiPanther\_33 Start: 34427, Stop: 34594, Start Num: 5  
Candidate Starts for MiamiPanther\_33:  
(Start: 5 @34427 has 42 MA's),

Gene: Moleficient\_34 Start: 35435, Stop: 35602, Start Num: 5  
Candidate Starts for Moleficient\_34:

(3, 35375), (4, 35378), (Start: 5 @35435 has 42 MA's), (6, 35504), (8, 35519),

Gene: Morrill\_32 Start: 35340, Stop: 35507, Start Num: 5

Candidate Starts for Morrill\_32:

(Start: 5 @35340 has 42 MA's), (6, 35409), (8, 35424),

Gene: Oatly\_36 Start: 34970, Stop: 35134, Start Num: 5

Candidate Starts for Oatly\_36:

(Start: 5 @34970 has 42 MA's), (7, 35042),

Gene: Pabst\_34 Start: 35039, Stop: 35203, Start Num: 5

Candidate Starts for Pabst\_34:

(Start: 5 @35039 has 42 MA's),

Gene: Pharky\_34 Start: 35431, Stop: 35598, Start Num: 5

Candidate Starts for Pharky\_34:

(3, 35371), (4, 35374), (Start: 5 @35431 has 42 MA's), (6, 35500), (8, 35515),

Gene: Phedro\_34 Start: 35431, Stop: 35598, Start Num: 5

Candidate Starts for Phedro\_34:

(3, 35371), (4, 35374), (Start: 5 @35431 has 42 MA's), (6, 35500), (8, 35515),

Gene: Phogo\_35 Start: 35176, Stop: 35334, Start Num: 5

Candidate Starts for Phogo\_35:

(Start: 5 @35176 has 42 MA's),

Gene: Phractured\_34 Start: 35431, Stop: 35598, Start Num: 5

Candidate Starts for Phractured\_34:

(3, 35371), (4, 35374), (Start: 5 @35431 has 42 MA's), (6, 35500), (8, 35515),

Gene: PhriedRice\_35 Start: 35535, Stop: 35702, Start Num: 5

Candidate Starts for PhriedRice\_35:

(3, 35475), (4, 35478), (Start: 5 @35535 has 42 MA's), (6, 35604), (8, 35619),

Gene: PineapplePluto\_37 Start: 35332, Stop: 35496, Start Num: 5

Candidate Starts for PineapplePluto\_37:

(Start: 5 @35332 has 42 MA's), (7, 35404),

Gene: RicoCaldo\_34 Start: 35513, Stop: 35680, Start Num: 5

Candidate Starts for RicoCaldo\_34:

(3, 35453), (4, 35456), (Start: 5 @35513 has 42 MA's), (6, 35582), (8, 35597),

Gene: ShyRosie\_36 Start: 35501, Stop: 35671, Start Num: 5

Candidate Starts for ShyRosie\_36:

(Start: 5 @35501 has 42 MA's), (6, 35570), (8, 35585),

Gene: StagePhright\_34 Start: 35431, Stop: 35598, Start Num: 5

Candidate Starts for StagePhright\_34:

(3, 35371), (4, 35374), (Start: 5 @35431 has 42 MA's), (6, 35500), (8, 35515),

Gene: Stormbreaker\_35 Start: 35270, Stop: 35428, Start Num: 5

Candidate Starts for Stormbreaker\_35:

(Start: 5 @35270 has 42 MA's),

Gene: SwissCheezer\_35 Start: 34916, Stop: 35074, Start Num: 5  
Candidate Starts for SwissCheezer\_35:  
(Start: 5 @34916 has 42 MA's),

Gene: ThirteenKH\_32 Start: 35350, Stop: 35517, Start Num: 5  
Candidate Starts for ThirteenKH\_32:  
(Start: 5 @35350 has 42 MA's), (6, 35419), (8, 35434),

Gene: TicTac\_36 Start: 35331, Stop: 35495, Start Num: 5  
Candidate Starts for TicTac\_36:  
(Start: 5 @35331 has 42 MA's), (7, 35403),

Gene: TinyTimothy\_31 Start: 34427, Stop: 34594, Start Num: 5  
Candidate Starts for TinyTimothy\_31:  
(Start: 5 @34427 has 42 MA's),

Gene: TownLake\_34 Start: 35041, Stop: 35199, Start Num: 5  
Candidate Starts for TownLake\_34:  
(Start: 5 @35041 has 42 MA's),

Gene: TrippleS\_33 Start: 35498, Stop: 35665, Start Num: 5  
Candidate Starts for TrippleS\_33:  
(Start: 5 @35498 has 42 MA's), (6, 35567), (8, 35582),

Gene: Truong\_34 Start: 35281, Stop: 35451, Start Num: 5  
Candidate Starts for Truong\_34:  
(Start: 5 @35281 has 42 MA's), (6, 35350), (8, 35365),

Gene: Unphazed\_35 Start: 35146, Stop: 35304, Start Num: 5  
Candidate Starts for Unphazed\_35:  
(Start: 5 @35146 has 42 MA's),

Gene: Waterlily\_37 Start: 35535, Stop: 35705, Start Num: 5  
Candidate Starts for Waterlily\_37:  
(Start: 5 @35535 has 42 MA's), (6, 35604), (8, 35619),

Gene: Wesak\_32 Start: 34269, Stop: 34436, Start Num: 5  
Candidate Starts for Wesak\_32:  
(Start: 5 @34269 has 42 MA's),

Gene: Xitlalli\_33 Start: 35138, Stop: 35296, Start Num: 5  
Candidate Starts for Xitlalli\_33:  
(Start: 5 @35138 has 42 MA's),

Gene: Yafa\_34 Start: 35254, Stop: 35421, Start Num: 5  
Candidate Starts for Yafa\_34:  
(Start: 5 @35254 has 42 MA's), (6, 35323), (8, 35338),

Gene: YellowPanda\_34 Start: 34150, Stop: 34317, Start Num: 5  
Candidate Starts for YellowPanda\_34:  
(Start: 5 @34150 has 42 MA's),

Gene: Zhengyi\_32 Start: 35474, Stop: 35701, Start Num: 2

Candidate Starts for Zhengyi\_32:

(1, 35471), (Start: 2 @35474 has 1 MA's), (Start: 5 @35540 has 42 MA's),