# Pham 345750


1: KingKamren_31
2: EugeneKrabs_32
3: Zhengyi_32
4: Birdfeeder_33 + 15
5: Sorvannah_32 + 6
6: Oatly_36 + 5
7: Pabst_34
8: Ashton_35 + 8
9: Yafa_34 + 4
10: Pharky_34 + 10
11: Kosier_34 + 1
12: JimmyPG_34
13: Kikiko_30 + 1

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 345750 Report

This analysis was run 11/14/26 on database version 672.

Pham number 345750 has 63 members, 9 are drafts.

Phages represented in each track:
• Track 1 : KingKamren_31
• Track 2 : EugeneKrabs_32
• Track 3 : Zhengyi_32
• Track 4 : Birdfeeder_33, Conditioner_34, BlueRugrat_34, Corn21_34, SwissCheezer_34, LesNorah_35, Stormbreaker_35, Unphazed_35, LilyLou_36, Alex44_35, ArMaWen_34, Dashyla_34, TownLake_33, Phogo_35, Xitlalli_33, DumpQuist_34
• Track 5 : Sorvannah_32, Salvatore2000_32, MiamiPanther_33, YellowPanda_34, 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, SoilSleuth_36, Waterlily_37, AloeVera_35, Akoni_34, Truong_34, JordanFarm_36, ShyRosie_34
• Track 9 : Yafa_34, ThirteenKH_32, Atraxi_32, TrippleS_33, Morrill_32
• Track 10 : Pharky_34, Fullmetal_34, Mazun_35, Keough_33, Phedro_34, PhriedRice_35, StagePhright_34, RicoCaldo_34, Moleficent_34, Astartes_34, Phractured_34
• Track 11 : Kosier_34, Fede_34
• Track 12 : JimmyPG_34
• Track 13 : Kikiko_30, MissAmericana_33

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

The start number called the most often in the published annotations is 4, it was called in 52 of the 54 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, Conditioner_34, Corn21_34, CrunchyBoi_37, Dashyla_34, DumpQuist_34, EugeneKrabs_32, Fede_34, Fullmetal_34, HitchHiker_37, JessellCookie_33, JimmyPG_34, JordanFarm_36, Keough_33, KingKamren_31, Kosier_34, LesNorah_35, LilyLou_36, Mazun_35, MiamiPanther_33, Moleficent_34, Morrill_32, Oatly_36, Pabst_34,

Pharky_34, Phedro_34, Phogo_35, Phractured_34, PhriedRice_35, PineapplePluto_37, RicoCaldo_34, Salvatore2000_32, ShyRosie_34, SoilSleuth_36, Sorvannah_32, StagePhright_34, Stormbreaker_35, SwissCheezer_34, ThirteenKH_32, TicTac_36, TinyTimothy_31, TownLake_33, 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:
• Kikiko_30, MissAmericana_33,

**Summary by start number:**

Start 2:
• Found in 14 of 63 ( 22.2% ) of genes in pham
• Manual Annotations of this start: 1 of 54
• Called 7.1% of time when present
• Phage (with cluster) where this start called: Zhengyi_32 (EK),

Start 4:
• Found in 61 of 63 ( 96.8% ) of genes in pham
• Manual Annotations of this start: 52 of 54
• Called 98.4% 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), Conditioner_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), JimmyPG_34 (EK2), JordanFarm_36 (EK2), Keough_33 (EK2), KingKamren_31 (EK), Kosier_34 (EK2), LesNorah_35 (EK1), LilyLou_36 (EK1), Mazun_35 (EK2), MiamiPanther_33 (EK1), Moleficent_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), Salvatore2000_32 (EK1), ShyRosie_34 (EK2), SoilSleuth_36 (EK2), Sorvannah_32 (EK1), StagePhright_34 (EK2), Stormbreaker_35 (EK1), SwissCheezer_34 (EK1), ThirteenKH_32 (EK2), TicTac_36 (EK1), TinyTimothy_31 (EK1), TownLake_33 (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),

Start 5:
• Found in 2 of 63 ( 3.2% ) of genes in pham
• Manual Annotations of this start: 1 of 54
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kikiko_30 (EM2), MissAmericana_33 (EM2),

**Summary by clusters:**

There are 4 clusters represented in this pham: EK, EK2, EK1, EM2,

Info for manual annotations of cluster EK:
•Start number 2 was manually annotated 1 time for cluster EK.
•Start number 4 was manually annotated 2 times for cluster EK.

Info for manual annotations of cluster EK1:
•Start number 4 was manually annotated 27 times for cluster EK1.

Info for manual annotations of cluster EK2:
•Start number 4 was manually annotated 23 times for cluster EK2.

Info for manual annotations of cluster EM2:
•Start number 5 was manually annotated 1 time for cluster EM2.

***Gene Information:***

Gene: Akoni_34 Start: 35279, Stop: 35449, Start Num: 4
Candidate Starts for Akoni_34:
(Start: 4 @35279 has 52 MA's), (7, 35348), (9, 35363),

Gene: Alex44_35 Start: 35362, Stop: 35520, Start Num: 4
Candidate Starts for Alex44_35:
(Start: 4 @35362 has 52 MA's),

Gene: AloeVera_35 Start: 35493, Stop: 35663, Start Num: 4
Candidate Starts for AloeVera_35:
(Start: 4 @35493 has 52 MA's), (7, 35562), (9, 35577),

Gene: ArMaWen_34 Start: 34905, Stop: 35063, Start Num: 4
Candidate Starts for ArMaWen_34:
(Start: 4 @34905 has 52 MA's),

Gene: Ashton_35 Start: 35492, Stop: 35662, Start Num: 4
Candidate Starts for Ashton_35:
(Start: 4 @35492 has 52 MA's), (7, 35561), (9, 35576),

Gene: Astartes_34 Start: 35568, Stop: 35735, Start Num: 4
Candidate Starts for Astartes_34:
(Start: 2 @35508 has 1 MA's), (3, 35511), (Start: 4 @35568 has 52 MA's), (7, 35637), (9, 35652),

Gene: Atraxi_32 Start: 35359, Stop: 35526, Start Num: 4
Candidate Starts for Atraxi_32:
(Start: 4 @35359 has 52 MA's), (7, 35428), (9, 35443),

Gene: Barroma_33 Start: 35281, Stop: 35451, Start Num: 4
Candidate Starts for Barroma_33:
(Start: 4 @35281 has 52 MA's), (7, 35350), (9, 35365),

Gene: Biozilla_36 Start: 35410, Stop: 35574, Start Num: 4
Candidate Starts for Biozilla_36:
(Start: 4 @35410 has 52 MA's), (8, 35482),

Gene: Birdfeeder_33 Start: 35118, Stop: 35276, Start Num: 4
Candidate Starts for Birdfeeder_33:
(Start: 4 @35118 has 52 MA's),

Gene: BlueRugrat_34 Start: 35354, Stop: 35512, Start Num: 4
Candidate Starts for BlueRugrat_34:
(Start: 4 @35354 has 52 MA's),

Gene: Conditioner_34 Start: 35427, Stop: 35585, Start Num: 4
Candidate Starts for Conditioner_34:
(Start: 4 @35427 has 52 MA's),

Gene: Corn21_34 Start: 35432, Stop: 35590, Start Num: 4
Candidate Starts for Corn21_34:
(Start: 4 @35432 has 52 MA's),

Gene: CrunchyBoi_37 Start: 35265, Stop: 35429, Start Num: 4
Candidate Starts for CrunchyBoi_37:
(Start: 4 @35265 has 52 MA's), (8, 35337),

Gene: Dashyla_34 Start: 35036, Stop: 35194, Start Num: 4
Candidate Starts for Dashyla_34:
(Start: 4 @35036 has 52 MA's),

Gene: DumpQuist_34 Start: 34890, Stop: 35048, Start Num: 4
Candidate Starts for DumpQuist_34:
(Start: 4 @34890 has 52 MA's),

Gene: EugeneKrabs_32 Start: 35491, Stop: 35652, Start Num: 4
Candidate Starts for EugeneKrabs_32:
(1, 35422), (Start: 2 @35425 has 1 MA's), (Start: 4 @35491 has 52 MA's),

Gene: Fede_34 Start: 34815, Stop: 34982, Start Num: 4
Candidate Starts for Fede_34:
(Start: 4 @34815 has 52 MA's),

Gene: Fullmetal_34 Start: 35428, Stop: 35595, Start Num: 4
Candidate Starts for Fullmetal_34:
(Start: 2 @35368 has 1 MA's), (3, 35371), (Start: 4 @35428 has 52 MA's), (7, 35497), (9, 35512),

Gene: HitchHiker_37 Start: 35410, Stop: 35574, Start Num: 4
Candidate Starts for HitchHiker_37:
(Start: 4 @35410 has 52 MA's), (8, 35482),

Gene: JessellCookie_33 Start: 34427, Stop: 34594, Start Num: 4
Candidate Starts for JessellCookie_33:
(Start: 4 @34427 has 52 MA's),

Gene: JimmyPG_34 Start: 35704, Stop: 35871, Start Num: 4
Candidate Starts for JimmyPG_34:
(Start: 4 @35704 has 52 MA's), (7, 35773), (9, 35788),

Gene: JordanFarm_36 Start: 35493, Stop: 35663, Start Num: 4
Candidate Starts for JordanFarm_36:
(Start: 4 @35493 has 52 MA's), (7, 35562), (9, 35577),

Gene: Keough_33 Start: 35161, Stop: 35328, Start Num: 4
Candidate Starts for Keough_33:
(Start: 2 @35101 has 1 MA's), (3, 35104), (Start: 4 @35161 has 52 MA's), (7, 35230), (9, 35245),

Gene: Kikiko_30 Start: 35187, Stop: 35417, Start Num: 5
Candidate Starts for Kikiko_30:
(Start: 5 @35187 has 1 MA's), (6, 35217), (7, 35247),

Gene: KingKamren_31 Start: 35452, Stop: 35613, Start Num: 4
Candidate Starts for KingKamren_31:
(Start: 2 @35386 has 1 MA's), (Start: 4 @35452 has 52 MA's),

Gene: Kosier_34 Start: 34762, Stop: 34929, Start Num: 4
Candidate Starts for Kosier_34:
(Start: 4 @34762 has 52 MA's),

Gene: LesNorah_35 Start: 35751, Stop: 35909, Start Num: 4
Candidate Starts for LesNorah_35:
(Start: 4 @35751 has 52 MA's),

Gene: LilyLou_36 Start: 35354, Stop: 35512, Start Num: 4
Candidate Starts for LilyLou_36:
(Start: 4 @35354 has 52 MA's),

Gene: Mazun_35 Start: 35750, Stop: 35917, Start Num: 4
Candidate Starts for Mazun_35:
(Start: 2 @35690 has 1 MA's), (3, 35693), (Start: 4 @35750 has 52 MA's), (7, 35819), (9, 35834),

Gene: MiamiPanther_33 Start: 34427, Stop: 34594, Start Num: 4
Candidate Starts for MiamiPanther_33:
(Start: 4 @34427 has 52 MA's),

Gene: MissAmericana_33 Start: 35683, Stop: 35886, Start Num: 5
Candidate Starts for MissAmericana_33:
(Start: 5 @35683 has 1 MA's), (6, 35713), (7, 35743),

Gene: Moleficent_34 Start: 35435, Stop: 35602, Start Num: 4
Candidate Starts for Moleficent_34:
(Start: 2 @35375 has 1 MA's), (3, 35378), (Start: 4 @35435 has 52 MA's), (7, 35504), (9, 35519),

Gene: Morrill_32 Start: 35340, Stop: 35507, Start Num: 4
Candidate Starts for Morrill_32:
(Start: 4 @35340 has 52 MA's), (7, 35409), (9, 35424),

Gene: Oatly_36 Start: 34970, Stop: 35134, Start Num: 4
Candidate Starts for Oatly_36:
(Start: 4 @34970 has 52 MA's), (8, 35042),

Gene: Pabst_34 Start: 35039, Stop: 35203, Start Num: 4

Candidate Starts for Pabst_34:
(Start: 4 @35039 has 52 MA's),

Gene: Pharky_34 Start: 35431, Stop: 35598, Start Num: 4
Candidate Starts for Pharky_34:
(Start: 2 @35371 has 1 MA's), (3, 35374), (Start: 4 @35431 has 52 MA's), (7, 35500), (9, 35515),

Gene: Phedro_34 Start: 35431, Stop: 35598, Start Num: 4
Candidate Starts for Phedro_34:
(Start: 2 @35371 has 1 MA's), (3, 35374), (Start: 4 @35431 has 52 MA's), (7, 35500), (9, 35515),

Gene: Phogo_35 Start: 35176, Stop: 35334, Start Num: 4
Candidate Starts for Phogo_35:
(Start: 4 @35176 has 52 MA's),

Gene: Phractured_34 Start: 35431, Stop: 35598, Start Num: 4
Candidate Starts for Phractured_34:
(Start: 2 @35371 has 1 MA's), (3, 35374), (Start: 4 @35431 has 52 MA's), (7, 35500), (9, 35515),

Gene: PhriedRice_35 Start: 35535, Stop: 35702, Start Num: 4
Candidate Starts for PhriedRice_35:
(Start: 2 @35475 has 1 MA's), (3, 35478), (Start: 4 @35535 has 52 MA's), (7, 35604), (9, 35619),

Gene: PineapplePluto_37 Start: 35332, Stop: 35496, Start Num: 4
Candidate Starts for PineapplePluto_37:
(Start: 4 @35332 has 52 MA's), (8, 35404),

Gene: RicoCaldo_34 Start: 35513, Stop: 35680, Start Num: 4
Candidate Starts for RicoCaldo_34:
(Start: 2 @35453 has 1 MA's), (3, 35456), (Start: 4 @35513 has 52 MA's), (7, 35582), (9, 35597),

Gene: Salvatore2000_32 Start: 34427, Stop: 34594, Start Num: 4
Candidate Starts for Salvatore2000_32:
(Start: 4 @34427 has 52 MA's),

Gene: ShyRosie_34 Start: 35501, Stop: 35671, Start Num: 4
Candidate Starts for ShyRosie_34:
(Start: 4 @35501 has 52 MA's), (7, 35570), (9, 35585),

Gene: SoilSleuth_36 Start: 35323, Stop: 35493, Start Num: 4
Candidate Starts for SoilSleuth_36:
(Start: 4 @35323 has 52 MA's), (7, 35392), (9, 35407),

Gene: Sorvannah_32 Start: 34427, Stop: 34594, Start Num: 4
Candidate Starts for Sorvannah_32:
(Start: 4 @34427 has 52 MA's),

Gene: StagePhright_34 Start: 35431, Stop: 35598, Start Num: 4
Candidate Starts for StagePhright_34:
(Start: 2 @35371 has 1 MA's), (3, 35374), (Start: 4 @35431 has 52 MA's), (7, 35500), (9, 35515),

Gene: Stormbreaker_35 Start: 35270, Stop: 35428, Start Num: 4
Candidate Starts for Stormbreaker_35:

(Start: 4 @35270 has 52 MA's),

Gene: SwissCheezer_34 Start: 34916, Stop: 35074, Start Num: 4
Candidate Starts for SwissCheezer_34:
(Start: 4 @34916 has 52 MA's),

Gene: ThirteenKH_32 Start: 35350, Stop: 35517, Start Num: 4
Candidate Starts for ThirteenKH_32:
(Start: 4 @35350 has 52 MA's), (7, 35419), (9, 35434),

Gene: TicTac_36 Start: 35331, Stop: 35495, Start Num: 4
Candidate Starts for TicTac_36:
(Start: 4 @35331 has 52 MA's), (8, 35403),

Gene: TinyTimothy_31 Start: 34427, Stop: 34594, Start Num: 4
Candidate Starts for TinyTimothy_31:
(Start: 4 @34427 has 52 MA's),

Gene: TownLake_33 Start: 35041, Stop: 35199, Start Num: 4
Candidate Starts for TownLake_33:
(Start: 4 @35041 has 52 MA's),

Gene: TrippleS_33 Start: 35498, Stop: 35665, Start Num: 4
Candidate Starts for TrippleS_33:
(Start: 4 @35498 has 52 MA's), (7, 35567), (9, 35582),

Gene: Truong_34 Start: 35281, Stop: 35451, Start Num: 4
Candidate Starts for Truong_34:
(Start: 4 @35281 has 52 MA's), (7, 35350), (9, 35365),

Gene: Unphazed_35 Start: 35146, Stop: 35304, Start Num: 4
Candidate Starts for Unphazed_35:
(Start: 4 @35146 has 52 MA's),

Gene: Waterlily_37 Start: 35535, Stop: 35705, Start Num: 4
Candidate Starts for Waterlily_37:
(Start: 4 @35535 has 52 MA's), (7, 35604), (9, 35619),

Gene: Wesak_32 Start: 34269, Stop: 34436, Start Num: 4
Candidate Starts for Wesak_32:
(Start: 4 @34269 has 52 MA's),

Gene: Xitlalli_33 Start: 35138, Stop: 35296, Start Num: 4
Candidate Starts for Xitlalli_33:
(Start: 4 @35138 has 52 MA's),

Gene: Yafa_34 Start: 35254, Stop: 35421, Start Num: 4
Candidate Starts for Yafa_34:
(Start: 4 @35254 has 52 MA's), (7, 35323), (9, 35338),

Gene: YellowPanda_34 Start: 34150, Stop: 34317, Start Num: 4
Candidate Starts for YellowPanda_34:
(Start: 4 @34150 has 52 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: 4 @35540 has 52 MA's),