



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 280392 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280392 has 72 members, 21 are drafts.

Phages represented in each track:

- Track 1 : Upyo_35
- Track 2 : Widow_35, Puppies_34
- Track 3 : Trine_33
- Track 4 : Applejacks_35
- Track 5 : Gustav_36
- Track 6 : Elliott_34, Starburst_35, Quasar_34, Nina_34, Socotra_35, RedBaron_36, SweatNTears_35, PsychoKiller_33, Sopespian_33, Axym_33, RSchmailzl_35, GoldHunter_35, RADical_35, Burnsey_33
- Track 7 : Balloona_36
- Track 8 : Dre3_33, Gibbous_33
- Track 9 : Agatha_33, Cozz_33, Bubble_33
- Track 10 : McDazzle_39, SheckWes_40, MAnor_39, ElJefes_38
- Track 11 : KayGee_39, Elinal_41, Yucky_40
- Track 12 : Biskit_36, SketchMex_34, Troje_35
- Track 13 : ChocoMunchkin_35, CanesSauce_35, SteamedHams_37, Tolls_37, CaramellLatte_35
- Track 14 : BigChungus_37, Feastonyeet_37
- Track 15 : BillDoor_36
- Track 16 : SummitAcademy_37, PotPie_38, CocoaPuff_38
- Track 17 : Wolfwood_37, MaVan_35, Nibbles_34, Survivors_35, Zareef_35, Azira_35
- Track 18 : Buttrmlkdreams_35, Horseradish_35, Yummy_35, MScarn_36, Blondies_36
- Track 19 : ChickenTender_38
- Track 20 : HippoPololi_35
- Track 21 : Mayweather_41, Pons_39
- Track 22 : AikoCarson_37
- Track 23 : MunkgeeRoachy_33
- Track 24 : Typhonomachy_33, Carsonalex_33
- Track 25 : Amok_37, Emalyn_36
- Track 26 : Vine_40
- Track 27 : Fribs8_34
- Track 28 : Bavidard_37
- Track 29 : Archimedes_45

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

The start number called the most often in the published annotations is 9, it was called in 45 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha_33, AikoCarson_37, Amok_37, Archimedes_45, Axym_33, Balloona_36, Bavidard_37, BigChungus_37, BillDoor_36, Biskit_36, Blondies_36, Bubble_33, Burnsey_33, Buttrmlkdreams_35, CanesSauce_35, CaramelLatte_35, Carsonalex_33, ChickenTender_38, ChocoMunchkin_35, CocoaPuff_38, Cozz_33, Dre3_33, ElJefes_38, Elinal_41, Elliott_34, Emalyn_36, Feastonyeet_37, Fribs8_34, Gibbous_33, GoldHunter_35, Gustav_36, HippoPololi_35, Horseradish_35, KayGee_39, MAnor_39, MScarn_36, Mayweather_41, McDazzle_39, MunkgeeRoachy_33, Nina_34, Pons_39, PotPie_38, PsychoKiller_33, Puppies_34, Quasar_34, RADical_35, RSchmailzl_35, RedBaron_36, SheckWes_40, SketchMex_34, Socotra_35, Sopeopian_33, Starburst_35, SteamedHams_37, SummitAcademy_37, SweatNTears_35, Tolls_37, Troje_35, Typhonomachy_33, Upyo_35, Vine_40, Widow_35, Yucky_40, Yummy_35,

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

- Azira_35, MaVan_35, Nibbles_34, Survivors_35, Wolfwood_37, Zareef_35,

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

- Applejacks_35, Trine_33,

Summary by start number:

Start 7:

- Found in 1 of 72 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trine_33 (CD),

Start 8:

- Found in 1 of 72 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Applejacks_35 (CD),

Start 9:

- Found in 70 of 72 (97.2%) of genes in pham
- Manual Annotations of this start: 45 of 51
- Called 91.4% of time when present
- Phage (with cluster) where this start called: Agatha_33 (CT), AikoCarson_37 (CT), Amok_37 (CT), Archimedes_45 (DA), Axym_33 (CT), Balloona_36 (CT), Bavidard_37 (CT), BigChungus_37 (CT), BillDoor_36 (CT), Biskit_36 (CT), Blondies_36 (CT), Bubble_33 (CT), Burnsey_33 (CT), Buttrmlkdreams_35 (CT), CanesSauce_35 (CT), CaramelLatte_35 (CT), Carsonalex_33 (CT), ChickenTender_38 (CT), ChocoMunchkin_35 (CT), CocoaPuff_38 (CT), Cozz_33 (CT), Dre3_33 (CT), ElJefes_38 (CT), Elinal_41 (CT), Elliott_34 (CT), Emalyn_36 (CT), Feastonyeet_37 (CT), Fribs8_34 (CT), Gibbous_33 (CT), GoldHunter_35 (CT), Gustav_36 (CD), HippoPololi_35 (CT), Horseradish_35 (CT), KayGee_39 (CT), MAnor_39 (CT),

MScarn_36 (CT), Mayweather_41 (CT), McDazzle_39 (CT), MunkgeeRoachy_33 (CT), Nina_34 (CT), Pons_39 (CT), PotPie_38 (CT), PsychoKiller_33 (CT), Puppies_34 (CD), Quasar_34 (CT), RADical_35 (CT), RSchmailz_35 (CT), RedBaron_36 (CT), SheckWes_40 (CT), SketchMex_34 (CT), Socotra_35 (CT), Sopespian_33 (CT), Starburst_35 (CT), SteamedHams_37 (CT), SummitAcademy_37 (CT), SweatNTears_35 (CT), Tolls_37 (CT), Troje_35 (CT), Typhonmacy_33 (CT), Upyo_35 (CD), Vine_40 (CT), Widow_35 (CD), Yucky_40 (CT), Yummy_35 (CT),

Start 10:

- Found in 6 of 72 (8.3%) of genes in pham
- Manual Annotations of this start: 5 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azira_35 (CT), MaVan_35 (CT), Nibbles_34 (CT), Survivors_35 (CT), Wolfwood_37 (CT), Zareef_35 (CT),

Summary by clusters:

There are 3 clusters represented in this pham: CD, DA, CT,

Info for manual annotations of cluster CD:

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

Info for manual annotations of cluster CT:

- Start number 9 was manually annotated 40 times for cluster CT.
- Start number 10 was manually annotated 5 times for cluster CT.

Info for manual annotations of cluster DA:

- Start number 9 was manually annotated 1 time for cluster DA.

Gene Information:

Gene: Agatha_33 Start: 25902, Stop: 25997, Start Num: 9

Candidate Starts for Agatha_33:

(Start: 9 @25902 has 45 MA's), (13, 25923),

Gene: AikoCarson_37 Start: 27016, Stop: 27111, Start Num: 9

Candidate Starts for AikoCarson_37:

(Start: 9 @27016 has 45 MA's), (20, 27079), (24, 27100),

Gene: Amok_37 Start: 27040, Stop: 27135, Start Num: 9

Candidate Starts for Amok_37:

(Start: 9 @27040 has 45 MA's), (19, 27097), (20, 27103), (24, 27124),

Gene: Applejacks_35 Start: 27188, Stop: 27078, Start Num: 8

Candidate Starts for Applejacks_35:

(3, 27602), (8, 27188), (14, 27146), (25, 27086),

Gene: Archimedes_45 Start: 38693, Stop: 38800, Start Num: 9

Candidate Starts for Archimedes_45:

(6, 38633), (Start: 9 @38693 has 45 MA's), (16, 38744), (17, 38750), (20, 38768), (24, 38789),

Gene: Axym_33 Start: 25881, Stop: 25976, Start Num: 9

Candidate Starts for Axym_33:

(Start: 9 @25881 has 45 MA's), (13, 25902),

Gene: Azira_35 Start: 26826, Stop: 26930, Start Num: 10

Candidate Starts for Azira_35:

(Start: 9 @26823 has 45 MA's), (Start: 10 @26826 has 5 MA's), (13, 26856), (14, 26862), (18, 26889), (24, 26919),

Gene: Balloona_36 Start: 27738, Stop: 27833, Start Num: 9

Candidate Starts for Balloona_36:

(Start: 9 @27738 has 45 MA's), (12, 27753), (13, 27759), (22, 27813), (26, 27828),

Gene: Bavilard_37 Start: 27949, Stop: 28044, Start Num: 9

Candidate Starts for Bavilard_37:

(Start: 9 @27949 has 45 MA's), (12, 27964), (13, 27970), (20, 28012), (22, 28024), (26, 28039),

Gene: BigChungus_37 Start: 28139, Stop: 28234, Start Num: 9

Candidate Starts for BigChungus_37:

(1, 27701), (2, 27713), (Start: 9 @28139 has 45 MA's), (12, 28154), (13, 28160), (19, 28196), (22, 28214), (26, 28229),

Gene: BillDoor_36 Start: 26120, Stop: 26215, Start Num: 9

Candidate Starts for BillDoor_36:

(Start: 9 @26120 has 45 MA's), (12, 26135), (20, 26183),

Gene: Biskit_36 Start: 26209, Stop: 26304, Start Num: 9

Candidate Starts for Biskit_36:

(Start: 9 @26209 has 45 MA's), (13, 26230), (17, 26254),

Gene: Blondies_36 Start: 26185, Stop: 26280, Start Num: 9

Candidate Starts for Blondies_36:

(Start: 9 @26185 has 45 MA's), (13, 26206), (17, 26230),

Gene: Bubble_33 Start: 25882, Stop: 25977, Start Num: 9

Candidate Starts for Bubble_33:

(Start: 9 @25882 has 45 MA's), (13, 25903),

Gene: Burnsey_33 Start: 25894, Stop: 25989, Start Num: 9

Candidate Starts for Burnsey_33:

(Start: 9 @25894 has 45 MA's), (13, 25915),

Gene: Buttrmlkdreams_35 Start: 26191, Stop: 26286, Start Num: 9

Candidate Starts for Buttrmlkdreams_35:

(Start: 9 @26191 has 45 MA's), (13, 26212), (17, 26236),

Gene: CanesSauce_35 Start: 26616, Stop: 26711, Start Num: 9

Candidate Starts for CanesSauce_35:

(Start: 9 @26616 has 45 MA's), (20, 26679), (23, 26694),

Gene: CaramelLatte_35 Start: 26616, Stop: 26711, Start Num: 9

Candidate Starts for CaramellLatte_35:
(Start: 9 @26616 has 45 MA's), (20, 26679), (23, 26694),

Gene: Carsonalex_33 Start: 23980, Stop: 23885, Start Num: 9
Candidate Starts for Carsonalex_33:
(Start: 9 @23980 has 45 MA's), (13, 23959),

Gene: ChickenTender_38 Start: 26436, Stop: 26531, Start Num: 9
Candidate Starts for ChickenTender_38:
(Start: 9 @26436 has 45 MA's), (13, 26457), (15, 26472), (19, 26493),

Gene: ChocoMunchkin_35 Start: 26616, Stop: 26711, Start Num: 9
Candidate Starts for ChocoMunchkin_35:
(Start: 9 @26616 has 45 MA's), (20, 26679), (23, 26694),

Gene: CocoaPuff_38 Start: 28153, Stop: 28248, Start Num: 9
Candidate Starts for CocoaPuff_38:
(1, 27715), (2, 27727), (Start: 9 @28153 has 45 MA's), (12, 28168), (13, 28174), (22, 28228), (26, 28243),

Gene: Cozz_33 Start: 25883, Stop: 25978, Start Num: 9
Candidate Starts for Cozz_33:
(Start: 9 @25883 has 45 MA's), (13, 25904),

Gene: Dre3_33 Start: 26127, Stop: 26225, Start Num: 9
Candidate Starts for Dre3_33:
(5, 26019), (Start: 9 @26127 has 45 MA's), (19, 26187), (20, 26193), (24, 26214), (25, 26217),

Gene: ElJefes_38 Start: 28475, Stop: 28570, Start Num: 9
Candidate Starts for ElJefes_38:
(4, 28265), (Start: 9 @28475 has 45 MA's), (13, 28496), (20, 28538), (26, 28565),

Gene: Elinal_41 Start: 28517, Stop: 28612, Start Num: 9
Candidate Starts for Elinal_41:
(1, 28079), (2, 28091), (Start: 9 @28517 has 45 MA's), (12, 28532), (13, 28538), (20, 28580), (22, 28592), (26, 28607),

Gene: Elliott_34 Start: 25902, Stop: 25997, Start Num: 9
Candidate Starts for Elliott_34:
(Start: 9 @25902 has 45 MA's), (13, 25923),

Gene: Emalyn_36 Start: 26211, Stop: 26306, Start Num: 9
Candidate Starts for Emalyn_36:
(Start: 9 @26211 has 45 MA's), (19, 26268), (20, 26274), (24, 26295),

Gene: Feastonyeet_37 Start: 28139, Stop: 28234, Start Num: 9
Candidate Starts for Feastonyeet_37:
(1, 27701), (2, 27713), (Start: 9 @28139 has 45 MA's), (12, 28154), (13, 28160), (19, 28196), (22, 28214), (26, 28229),

Gene: Fribs8_34 Start: 26556, Stop: 26654, Start Num: 9
Candidate Starts for Fribs8_34:
(5, 26448), (Start: 9 @26556 has 45 MA's), (15, 26595), (21, 26625), (24, 26643), (25, 26646),

Gene: Gibbous_33 Start: 26127, Stop: 26225, Start Num: 9

Candidate Starts for Gibbous_33:

(5, 26019), (Start: 9 @26127 has 45 MA's), (19, 26187), (20, 26193), (24, 26214), (25, 26217),

Gene: GoldHunter_35 Start: 25903, Stop: 25998, Start Num: 9

Candidate Starts for GoldHunter_35:

(Start: 9 @25903 has 45 MA's), (13, 25924),

Gene: Gustav_36 Start: 28099, Stop: 27998, Start Num: 9

Candidate Starts for Gustav_36:

(Start: 9 @28099 has 45 MA's), (13, 28072), (24, 28009),

Gene: HippoPololi_35 Start: 26580, Stop: 26678, Start Num: 9

Candidate Starts for HippoPololi_35:

(Start: 9 @26580 has 45 MA's), (15, 26619), (24, 26667), (25, 26670),

Gene: Horseradish_35 Start: 25719, Stop: 25814, Start Num: 9

Candidate Starts for Horseradish_35:

(Start: 9 @25719 has 45 MA's), (13, 25740), (17, 25764),

Gene: KayGee_39 Start: 28517, Stop: 28612, Start Num: 9

Candidate Starts for KayGee_39:

(1, 28079), (2, 28091), (Start: 9 @28517 has 45 MA's), (12, 28532), (13, 28538), (20, 28580), (22, 28592), (26, 28607),

Gene: MAnor_39 Start: 28918, Stop: 29013, Start Num: 9

Candidate Starts for MAnor_39:

(4, 28708), (Start: 9 @28918 has 45 MA's), (13, 28939), (20, 28981), (26, 29008),

Gene: MScarn_36 Start: 25859, Stop: 25954, Start Num: 9

Candidate Starts for MScarn_36:

(Start: 9 @25859 has 45 MA's), (13, 25880), (17, 25904),

Gene: MaVan_35 Start: 26859, Stop: 26963, Start Num: 10

Candidate Starts for MaVan_35:

(Start: 9 @26856 has 45 MA's), (Start: 10 @26859 has 5 MA's), (13, 26889), (14, 26895), (18, 26922), (24, 26952),

Gene: Mayweather_41 Start: 29142, Stop: 29237, Start Num: 9

Candidate Starts for Mayweather_41:

(4, 28932), (Start: 9 @29142 has 45 MA's), (12, 29157), (13, 29163), (20, 29205), (26, 29232),

Gene: McDazzle_39 Start: 28469, Stop: 28564, Start Num: 9

Candidate Starts for McDazzle_39:

(4, 28259), (Start: 9 @28469 has 45 MA's), (13, 28490), (20, 28532), (26, 28559),

Gene: MunkgeeRoachy_33 Start: 25757, Stop: 25852, Start Num: 9

Candidate Starts for MunkgeeRoachy_33:

(Start: 9 @25757 has 45 MA's), (13, 25778), (15, 25793),

Gene: Nibbles_34 Start: 26543, Stop: 26647, Start Num: 10

Candidate Starts for Nibbles_34:

(Start: 9 @26540 has 45 MA's), (Start: 10 @26543 has 5 MA's), (13, 26573), (14, 26579), (18, 26606), (24, 26636),

Gene: Nina_34 Start: 26419, Stop: 26514, Start Num: 9

Candidate Starts for Nina_34:

(Start: 9 @26419 has 45 MA's), (13, 26440),

Gene: Pons_39 Start: 28493, Stop: 28588, Start Num: 9

Candidate Starts for Pons_39:

(4, 28283), (Start: 9 @28493 has 45 MA's), (12, 28508), (13, 28514), (20, 28556), (26, 28583),

Gene: PotPie_38 Start: 29430, Stop: 29525, Start Num: 9

Candidate Starts for PotPie_38:

(1, 28992), (2, 29004), (Start: 9 @29430 has 45 MA's), (12, 29445), (13, 29451), (22, 29505), (26, 29520),

Gene: PsychoKiller_33 Start: 25903, Stop: 25998, Start Num: 9

Candidate Starts for PsychoKiller_33:

(Start: 9 @25903 has 45 MA's), (13, 25924),

Gene: Puppies_34 Start: 26854, Stop: 26753, Start Num: 9

Candidate Starts for Puppies_34:

(Start: 9 @26854 has 45 MA's), (21, 26782), (25, 26761),

Gene: Quasar_34 Start: 26505, Stop: 26600, Start Num: 9

Candidate Starts for Quasar_34:

(Start: 9 @26505 has 45 MA's), (13, 26526),

Gene: RADical_35 Start: 25897, Stop: 25992, Start Num: 9

Candidate Starts for RADical_35:

(Start: 9 @25897 has 45 MA's), (13, 25918),

Gene: RSchmailzl_35 Start: 25940, Stop: 26035, Start Num: 9

Candidate Starts for RSchmailzl_35:

(Start: 9 @25940 has 45 MA's), (13, 25961),

Gene: RedBaron_36 Start: 26138, Stop: 26233, Start Num: 9

Candidate Starts for RedBaron_36:

(Start: 9 @26138 has 45 MA's), (13, 26159),

Gene: SheckWes_40 Start: 28014, Stop: 28109, Start Num: 9

Candidate Starts for SheckWes_40:

(4, 27804), (Start: 9 @28014 has 45 MA's), (13, 28035), (20, 28077), (26, 28104),

Gene: SketchMex_34 Start: 26209, Stop: 26304, Start Num: 9

Candidate Starts for SketchMex_34:

(Start: 9 @26209 has 45 MA's), (13, 26230), (17, 26254),

Gene: Socotra_35 Start: 25902, Stop: 25997, Start Num: 9

Candidate Starts for Socotra_35:

(Start: 9 @25902 has 45 MA's), (13, 25923),

Gene: Sopespian_33 Start: 25904, Stop: 25999, Start Num: 9

Candidate Starts for Sopespian_33:
(Start: 9 @25904 has 45 MA's), (13, 25925),

Gene: Starburst_35 Start: 25897, Stop: 25992, Start Num: 9
Candidate Starts for Starburst_35:
(Start: 9 @25897 has 45 MA's), (13, 25918),

Gene: SteamedHams_37 Start: 26589, Stop: 26684, Start Num: 9
Candidate Starts for SteamedHams_37:
(Start: 9 @26589 has 45 MA's), (20, 26652), (23, 26667),

Gene: SummitAcademy_37 Start: 28059, Stop: 28154, Start Num: 9
Candidate Starts for SummitAcademy_37:
(1, 27621), (2, 27633), (Start: 9 @28059 has 45 MA's), (12, 28074), (13, 28080), (22, 28134), (26, 28149),

Gene: Survivors_35 Start: 26752, Stop: 26856, Start Num: 10
Candidate Starts for Survivors_35:
(Start: 9 @26749 has 45 MA's), (Start: 10 @26752 has 5 MA's), (13, 26782), (14, 26788), (18, 26815), (24, 26845),

Gene: SweatNTears_35 Start: 25800, Stop: 25895, Start Num: 9
Candidate Starts for SweatNTears_35:
(Start: 9 @25800 has 45 MA's), (13, 25821),

Gene: Tolls_37 Start: 26688, Stop: 26783, Start Num: 9
Candidate Starts for Tolls_37:
(Start: 9 @26688 has 45 MA's), (20, 26751), (23, 26766),

Gene: Trine_33 Start: 26841, Stop: 26722, Start Num: 7
Candidate Starts for Trine_33:
(Start: 7 @26841 has 1 MA's), (11, 26805), (13, 26796),

Gene: Troje_35 Start: 26216, Stop: 26311, Start Num: 9
Candidate Starts for Troje_35:
(Start: 9 @26216 has 45 MA's), (13, 26237), (17, 26261),

Gene: Typhonomachy_33 Start: 25914, Stop: 26009, Start Num: 9
Candidate Starts for Typhonomachy_33:
(Start: 9 @25914 has 45 MA's), (13, 25935),

Gene: Upyo_35 Start: 28180, Stop: 28079, Start Num: 9
Candidate Starts for Upyo_35:
(Start: 9 @28180 has 45 MA's), (13, 28153), (14, 28147), (16, 28135), (17, 28129), (25, 28087),

Gene: Vine_40 Start: 28791, Stop: 28886, Start Num: 9
Candidate Starts for Vine_40:
(Start: 9 @28791 has 45 MA's), (12, 28806), (13, 28812), (20, 28854), (22, 28866), (26, 28881),

Gene: Widow_35 Start: 27935, Stop: 27834, Start Num: 9
Candidate Starts for Widow_35:
(Start: 9 @27935 has 45 MA's), (21, 27863), (25, 27842),

Gene: Wolfwood_37 Start: 26824, Stop: 26928, Start Num: 10

Candidate Starts for Wolfwood_37:

(Start: 9 @26821 has 45 MA's), (Start: 10 @26824 has 5 MA's), (13, 26854), (14, 26860), (18, 26887), (24, 26917),

Gene: Yucky_40 Start: 28731, Stop: 28826, Start Num: 9

Candidate Starts for Yucky_40:

(1, 28293), (2, 28305), (Start: 9 @28731 has 45 MA's), (12, 28746), (13, 28752), (20, 28794), (22, 28806), (26, 28821),

Gene: Yummy_35 Start: 25833, Stop: 25928, Start Num: 9

Candidate Starts for Yummy_35:

(Start: 9 @25833 has 45 MA's), (13, 25854), (17, 25878),

Gene: Zareef_35 Start: 26846, Stop: 26950, Start Num: 10

Candidate Starts for Zareef_35:

(Start: 9 @26843 has 45 MA's), (Start: 10 @26846 has 5 MA's), (13, 26876), (14, 26882), (18, 26909), (24, 26939),