

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 308715 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308715 has 54 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Gustav_43
- Track 2 : Morrissey_41
- Track 3 : Mahdia_40
- Track 4 : Trine_39
- Track 5 : Puppies_38, Widow_40
- Track 6 : Upyo_42
- Track 7 : Applejacks_40
- Track 8 : Starburst_52, Quasar_52, Agatha_52, RADical_53, Sopespian_49, Cozz_50, Socotra_53, RSchmailzl_53, Carsonalex_55, SweatNTears_54, Elliott_52, Axym_51, Typhonmarchy_51, GoldHunter_53, Burnsey_52, Bubble_50, PsychoKiller_51
- Track 9 : Cleo_46, Dre3_47, Gibbous_47
- Track 10 : Wallaby_50, Nibbles_47, Zareef_48
- Track 11 : AikoCarson_53
- Track 12 : MaVan_48, Azira_48, Wolfwood_48, Survivors_48
- Track 13 : Emalyn_51, Amok_53
- Track 14 : Nina_51
- Track 15 : SteamedHams_53, Tolls_53
- Track 16 : AndPeggy_49, CanesSauce_51, CaramelLatte_51, BillDoor_52, Yarn_49, ChocoMunchkin_51
- Track 17 : GTE2_43
- Track 18 : Fribs8_47
- Track 19 : ChickenTender_55
- Track 20 : HippoPololi_49
- Track 21 : Malvina_50
- Track 22 : MunkgeeRoachy_50
- Track 23 : RedBaron_56

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

The start number called the most often in the published annotations is 14, it was called in 20 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha_52, AikoCarson_53, Amok_53, AndPeggy_49, Axym_51, BillDoor_52, Bubble_50, Burnsey_52, CanesSauce_51, CaramelLatte_51, Carsonalex_55, ChickenTender_55, ChocoMunchkin_51, Cozz_50, Elliott_52, Emalyn_51, GTE2_43, GoldHunter_53, MunkgeeRoachy_50, Nina_51, PsychoKiller_51, Quasar_52, RADical_53, RSchmailzl_53, RedBaron_56, Socotra_53, Sopespian_49, Starburst_52, SteamedHams_53, SweatNTears_54, Tolls_53, Typhonomachy_51, Yarn_49,

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

-

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

- Applejacks_40, Azira_48, Cleo_46, Dre3_47, Fribs8_47, Gibbous_47, Gustav_43, HippoPololi_49, MaVan_48, Mahdia_40, Malvina_50, Morrissey_41, Nibbles_47, Puppies_38, Survivors_48, Trine_39, Upyo_42, Wallaby_50, Widow_40, Wolfwood_48, Zareef_48,

Summary by start number:

Start 1:

- Found in 2 of 54 (3.7%) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Puppies_38 (CD), Widow_40 (CD),

Start 3:

- Found in 1 of 54 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mahdia_40 (CD),

Start 4:

- Found in 1 of 54 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trine_39 (CD),

Start 6:

- Found in 1 of 54 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Upyo_42 (CD),

Start 7:

- Found in 1 of 54 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrissey_41 (CD),

Start 8:

- Found in 1 of 54 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Gustav_43 (CD),

Start 9:

- Found in 1 of 54 (1.9%) 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_40 (CD),

Start 12:

- Found in 10 of 54 (18.5%) of genes in pham
- Manual Annotations of this start: 6 of 38
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Azira_48 (CT), Fribs8_47 (CT), HippoPololi_49 (CT), MaVan_48 (CT), Survivors_48 (CT), Wolfwood_48 (CT),

Start 14:

- Found in 33 of 54 (61.1%) of genes in pham
- Manual Annotations of this start: 20 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agatha_52 (CT), AikoCarson_53 (CT), Amok_53 (CT), AndPeggy_49 (CT), Axym_51 (CT), BillDoor_52 (CT), Bubble_50 (CT), Burnsey_52 (CT), CanesSauce_51 (CT), CaramelLatte_51 (CT), Carsonalex_55 (CT), ChickenTender_55 (CT), ChocoMunchkin_51 (CT), Cozz_50 (CT), Elliott_52 (CT), Emalyn_51 (CT), GTE2_43 (CT), GoldHunter_53 (CT), MunkgeeRoachy_50 (CT), Nina_51 (CT), PsychoKiller_51 (CT), Quasar_52 (CT), RADical_53 (CT), RSchmailzl_53 (CT), RedBaron_56 (CT), Socotra_53 (CT), Sopespian_49 (CT), Starburst_52 (CT), SteamedHams_53 (CT), SweatNTears_54 (CT), Tolls_53 (CT), Typhonomachy_51 (CT), Yarn_49 (CT),

Start 16:

- Found in 13 of 54 (24.1%) of genes in pham
- Manual Annotations of this start: 5 of 38
- Called 53.8% of time when present
- Phage (with cluster) where this start called: Cleo_46 (CT), Dre3_47 (CT), Gibbous_47 (CT), Malvina_50 (CT), Nibbles_47 (CT), Wallaby_50 (CT), Zareef_48 (CT),

Summary by clusters:

There are 2 clusters represented in this pham: CD, CT,

Info for manual annotations of cluster CD:

- Start number 1 was manually annotated 2 times for cluster CD.
- Start number 3 was manually annotated 1 time for cluster CD.
- Start number 4 was manually annotated 1 time for cluster CD.
- Start number 6 was manually annotated 1 time for cluster CD.
- Start number 7 was manually annotated 1 time for cluster CD.
- Start number 8 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CT:

- Start number 12 was manually annotated 6 times for cluster CT.
- Start number 14 was manually annotated 20 times for cluster CT.
- Start number 16 was manually annotated 5 times for cluster CT.

Gene Information:

Gene: Agatha_52 Start: 37367, Stop: 37041, Start Num: 14

Candidate Starts for Agatha_52:

(Start: 14 @37367 has 20 MA's), (18, 37343), (21, 37316), (24, 37277), (30, 37226), (35, 37190), (39, 37154), (42, 37124), (47, 37088),

Gene: AikoCarson_53 Start: 37632, Stop: 37321, Start Num: 14

Candidate Starts for AikoCarson_53:

(Start: 14 @37632 has 20 MA's), (29, 37512), (33, 37485),

Gene: Amok_53 Start: 37560, Stop: 37246, Start Num: 14

Candidate Starts for Amok_53:

(Start: 14 @37560 has 20 MA's), (20, 37524),

Gene: AndPeggy_49 Start: 36840, Stop: 36526, Start Num: 14

Candidate Starts for AndPeggy_49:

(Start: 14 @36840 has 20 MA's), (23, 36780), (29, 36717), (42, 36609),

Gene: Applejacks_40 Start: 31333, Stop: 30944, Start Num: 9

Candidate Starts for Applejacks_40:

(9, 31333), (25, 31180), (32, 31126), (36, 31093), (37, 31087), (43, 31030), (46, 31012), (51, 30964),

Gene: Axym_51 Start: 37264, Stop: 36938, Start Num: 14

Candidate Starts for Axym_51:

(Start: 14 @37264 has 20 MA's), (18, 37240), (21, 37213), (24, 37174), (30, 37123), (35, 37087), (39, 37051), (42, 37021), (47, 36985),

Gene: Azira_48 Start: 36422, Stop: 36099, Start Num: 12

Candidate Starts for Azira_48:

(Start: 12 @36422 has 6 MA's), (Start: 16 @36407 has 5 MA's), (19, 36380), (20, 36377), (26, 36296), (35, 36248), (37, 36227), (42, 36182), (47, 36146),

Gene: BillDoor_52 Start: 36516, Stop: 36196, Start Num: 14

Candidate Starts for BillDoor_52:

(Start: 14 @36516 has 20 MA's), (23, 36456), (29, 36387), (42, 36279),

Gene: Bubble_50 Start: 36952, Stop: 36626, Start Num: 14

Candidate Starts for Bubble_50:

(Start: 14 @36952 has 20 MA's), (18, 36928), (21, 36901), (24, 36862), (30, 36811), (35, 36775), (39, 36739), (42, 36709), (47, 36673),

Gene: Burnsey_52 Start: 37358, Stop: 37032, Start Num: 14

Candidate Starts for Burnsey_52:

(Start: 14 @37358 has 20 MA's), (18, 37334), (21, 37307), (24, 37268), (30, 37217), (35, 37181), (39, 37145), (42, 37115), (47, 37079),

Gene: CanesSauce_51 Start: 37010, Stop: 36696, Start Num: 14

Candidate Starts for CanesSauce_51:

(Start: 14 @37010 has 20 MA's), (23, 36950), (29, 36887), (42, 36779),

Gene: CaramelLatte_51 Start: 37010, Stop: 36696, Start Num: 14
Candidate Starts for CaramelLatte_51:
(Start: 14 @37010 has 20 MA's), (23, 36950), (29, 36887), (42, 36779),

Gene: Carsonalex_55 Start: 37324, Stop: 36998, Start Num: 14
Candidate Starts for Carsonalex_55:
(Start: 14 @37324 has 20 MA's), (18, 37300), (21, 37273), (24, 37234), (30, 37183), (35, 37147), (39, 37111), (42, 37081), (47, 37045),

Gene: ChickenTender_55 Start: 37045, Stop: 36722, Start Num: 14
Candidate Starts for ChickenTender_55:
(Start: 14 @37045 has 20 MA's), (30, 36904), (42, 36805),

Gene: ChocoMunchkin_51 Start: 37010, Stop: 36696, Start Num: 14
Candidate Starts for ChocoMunchkin_51:
(Start: 14 @37010 has 20 MA's), (23, 36950), (29, 36887), (42, 36779),

Gene: Cleo_46 Start: 36154, Stop: 35843, Start Num: 16
Candidate Starts for Cleo_46:
(Start: 16 @36154 has 5 MA's), (17, 36145), (19, 36127), (20, 36124), (26, 36040), (40, 35944), (42, 35926), (47, 35890),

Gene: Cozz_50 Start: 36955, Stop: 36629, Start Num: 14
Candidate Starts for Cozz_50:
(Start: 14 @36955 has 20 MA's), (18, 36931), (21, 36904), (24, 36865), (30, 36814), (35, 36778), (39, 36742), (42, 36712), (47, 36676),

Gene: Dre3_47 Start: 35897, Stop: 35586, Start Num: 16
Candidate Starts for Dre3_47:
(Start: 16 @35897 has 5 MA's), (17, 35888), (19, 35870), (20, 35867), (26, 35783), (40, 35687), (42, 35669), (47, 35633),

Gene: Elliott_52 Start: 37251, Stop: 36925, Start Num: 14
Candidate Starts for Elliott_52:
(Start: 14 @37251 has 20 MA's), (18, 37227), (21, 37200), (24, 37161), (30, 37110), (35, 37074), (39, 37038), (42, 37008), (47, 36972),

Gene: Emalyn_51 Start: 36352, Stop: 36038, Start Num: 14
Candidate Starts for Emalyn_51:
(Start: 14 @36352 has 20 MA's), (20, 36316),

Gene: Fribs8_47 Start: 36192, Stop: 35860, Start Num: 12
Candidate Starts for Fribs8_47:
(Start: 12 @36192 has 6 MA's), (Start: 16 @36177 has 5 MA's), (17, 36168), (19, 36150), (20, 36147), (42, 35943), (47, 35907),

Gene: GTE2_43 Start: 36955, Stop: 36635, Start Num: 14
Candidate Starts for GTE2_43:
(Start: 14 @36955 has 20 MA's), (42, 36718),

Gene: Gibbous_47 Start: 35897, Stop: 35586, Start Num: 16
Candidate Starts for Gibbous_47:

(Start: 16 @35897 has 5 MA's), (17, 35888), (19, 35870), (20, 35867), (26, 35783), (40, 35687), (42, 35669), (47, 35633),

Gene: GoldHunter_53 Start: 37368, Stop: 37042, Start Num: 14

Candidate Starts for GoldHunter_53:

(Start: 14 @37368 has 20 MA's), (18, 37344), (21, 37317), (24, 37278), (30, 37227), (35, 37191), (39, 37155), (42, 37125), (47, 37089),

Gene: Gustav_43 Start: 32873, Stop: 32505, Start Num: 8

Candidate Starts for Gustav_43:

(5, 32882), (Start: 8 @32873 has 1 MA's), (29, 32705), (34, 32672), (37, 32648),

Gene: HippoPololi_49 Start: 36327, Stop: 35998, Start Num: 12

Candidate Starts for HippoPololi_49:

(Start: 12 @36327 has 6 MA's), (Start: 16 @36312 has 5 MA's), (17, 36303), (19, 36285), (20, 36282), (39, 36111), (40, 36099), (42, 36081), (47, 36045),

Gene: MaVan_48 Start: 36451, Stop: 36128, Start Num: 12

Candidate Starts for MaVan_48:

(Start: 12 @36451 has 6 MA's), (Start: 16 @36436 has 5 MA's), (19, 36409), (20, 36406), (26, 36325), (35, 36277), (37, 36256), (42, 36211), (47, 36175),

Gene: Mahdia_40 Start: 31815, Stop: 31420, Start Num: 3

Candidate Starts for Mahdia_40:

(Start: 3 @31815 has 1 MA's), (10, 31773), (27, 31629), (37, 31563), (39, 31548), (45, 31491),

Gene: Malvina_50 Start: 36310, Stop: 36005, Start Num: 16

Candidate Starts for Malvina_50:

(Start: 12 @36325 has 6 MA's), (Start: 16 @36310 has 5 MA's), (17, 36301), (19, 36283), (20, 36280), (34, 36157), (39, 36118), (40, 36106), (42, 36088), (47, 36052),

Gene: Morrissey_41 Start: 32244, Stop: 31873, Start Num: 7

Candidate Starts for Morrissey_41:

(Start: 7 @32244 has 1 MA's), (17, 32184), (38, 32004), (45, 31944), (52, 31884),

Gene: MunkgeeRoachy_50 Start: 36714, Stop: 36388, Start Num: 14

Candidate Starts for MunkgeeRoachy_50:

(Start: 14 @36714 has 20 MA's), (18, 36690), (21, 36663), (24, 36624), (28, 36588), (30, 36573), (35, 36537), (42, 36471), (44, 36453), (47, 36435),

Gene: Nibbles_47 Start: 36132, Stop: 35824, Start Num: 16

Candidate Starts for Nibbles_47:

(Start: 12 @36147 has 6 MA's), (Start: 16 @36132 has 5 MA's), (19, 36105), (20, 36102), (26, 36021), (35, 35973), (37, 35952), (42, 35907), (47, 35871),

Gene: Nina_51 Start: 37528, Stop: 37208, Start Num: 14

Candidate Starts for Nina_51:

(Start: 14 @37528 has 20 MA's), (18, 37504), (21, 37483), (24, 37444), (30, 37393), (35, 37357), (39, 37321), (42, 37291), (44, 37273), (47, 37255),

Gene: PsychoKiller_51 Start: 37252, Stop: 36926, Start Num: 14

Candidate Starts for PsychoKiller_51:

(Start: 14 @37252 has 20 MA's), (18, 37228), (21, 37201), (24, 37162), (30, 37111), (35, 37075), (39, 37039), (42, 37009), (47, 36973),

Gene: Puppies_38 Start: 31067, Stop: 30642, Start Num: 1

Candidate Starts for Puppies_38:

(Start: 1 @31067 has 2 MA's), (22, 30935), (27, 30866), (37, 30794), (39, 30779), (45, 30722), (51, 30671),

Gene: Quasar_52 Start: 37956, Stop: 37633, Start Num: 14

Candidate Starts for Quasar_52:

(Start: 14 @37956 has 20 MA's), (18, 37932), (21, 37905), (24, 37866), (30, 37818), (35, 37782), (39, 37746), (42, 37716), (47, 37680),

Gene: RADical_53 Start: 37246, Stop: 36920, Start Num: 14

Candidate Starts for RADical_53:

(Start: 14 @37246 has 20 MA's), (18, 37222), (21, 37195), (24, 37156), (30, 37105), (35, 37069), (39, 37033), (42, 37003), (47, 36967),

Gene: RSchmailzl_53 Start: 37402, Stop: 37076, Start Num: 14

Candidate Starts for RSchmailzl_53:

(Start: 14 @37402 has 20 MA's), (18, 37378), (21, 37351), (24, 37312), (30, 37261), (35, 37225), (39, 37189), (42, 37159), (47, 37123),

Gene: RedBaron_56 Start: 37581, Stop: 37255, Start Num: 14

Candidate Starts for RedBaron_56:

(Start: 14 @37581 has 20 MA's), (18, 37557), (21, 37530), (24, 37491), (30, 37440), (35, 37404), (39, 37368), (42, 37338), (47, 37302),

Gene: Socotra_53 Start: 37364, Stop: 37038, Start Num: 14

Candidate Starts for Socotra_53:

(Start: 14 @37364 has 20 MA's), (18, 37340), (21, 37313), (24, 37274), (30, 37223), (35, 37187), (39, 37151), (42, 37121), (47, 37085),

Gene: Sopespian_49 Start: 37253, Stop: 36927, Start Num: 14

Candidate Starts for Sopespian_49:

(Start: 14 @37253 has 20 MA's), (18, 37229), (21, 37202), (24, 37163), (30, 37112), (35, 37076), (39, 37040), (42, 37010), (47, 36974),

Gene: Starburst_52 Start: 37248, Stop: 36922, Start Num: 14

Candidate Starts for Starburst_52:

(Start: 14 @37248 has 20 MA's), (18, 37224), (21, 37197), (24, 37158), (30, 37107), (35, 37071), (39, 37035), (42, 37005), (47, 36969),

Gene: SteamedHams_53 Start: 36817, Stop: 36497, Start Num: 14

Candidate Starts for SteamedHams_53:

(Start: 14 @36817 has 20 MA's), (23, 36757), (42, 36580),

Gene: Survivors_48 Start: 36347, Stop: 36024, Start Num: 12

Candidate Starts for Survivors_48:

(Start: 12 @36347 has 6 MA's), (Start: 16 @36332 has 5 MA's), (19, 36305), (20, 36302), (26, 36221), (35, 36173), (37, 36152), (42, 36107), (47, 36071),

Gene: SweatNTears_54 Start: 37495, Stop: 37169, Start Num: 14

Candidate Starts for SweatNTears_54:

(Start: 14 @37495 has 20 MA's), (18, 37471), (21, 37444), (24, 37405), (30, 37354), (35, 37318), (39, 37282), (42, 37252), (47, 37216),

Gene: Tolls_53 Start: 37088, Stop: 36768, Start Num: 14

Candidate Starts for Tolls_53:

(Start: 14 @37088 has 20 MA's), (23, 37028), (42, 36851),

Gene: Trine_39 Start: 31423, Stop: 31040, Start Num: 4

Candidate Starts for Trine_39:

(Start: 4 @31423 has 1 MA's), (10, 31384), (15, 31366), (31, 31225), (48, 31093), (50, 31075),

Gene: Typhonomachy_51 Start: 37077, Stop: 36751, Start Num: 14

Candidate Starts for Typhonomachy_51:

(Start: 14 @37077 has 20 MA's), (18, 37053), (21, 37026), (24, 36987), (30, 36936), (35, 36900), (39, 36864), (42, 36834), (47, 36798),

Gene: Upyo_42 Start: 32741, Stop: 32373, Start Num: 6

Candidate Starts for Upyo_42:

(2, 32747), (Start: 6 @32741 has 1 MA's), (11, 32705), (13, 32702), (31, 32558), (41, 32486), (42, 32471), (49, 32420),

Gene: Wallaby_50 Start: 36430, Stop: 36122, Start Num: 16

Candidate Starts for Wallaby_50:

(Start: 12 @36445 has 6 MA's), (Start: 16 @36430 has 5 MA's), (19, 36403), (20, 36400), (26, 36319), (35, 36271), (37, 36250), (42, 36205), (47, 36169),

Gene: Widow_40 Start: 32148, Stop: 31723, Start Num: 1

Candidate Starts for Widow_40:

(Start: 1 @32148 has 2 MA's), (22, 32016), (27, 31947), (37, 31875), (39, 31860), (45, 31803), (51, 31752),

Gene: Wolfwood_48 Start: 36419, Stop: 36096, Start Num: 12

Candidate Starts for Wolfwood_48:

(Start: 12 @36419 has 6 MA's), (Start: 16 @36404 has 5 MA's), (19, 36377), (20, 36374), (26, 36293), (35, 36245), (37, 36224), (42, 36179), (47, 36143),

Gene: Yarn_49 Start: 36845, Stop: 36531, Start Num: 14

Candidate Starts for Yarn_49:

(Start: 14 @36845 has 20 MA's), (23, 36785), (29, 36722), (42, 36614),

Gene: Zareef_48 Start: 36426, Stop: 36118, Start Num: 16

Candidate Starts for Zareef_48:

(Start: 12 @36441 has 6 MA's), (Start: 16 @36426 has 5 MA's), (19, 36399), (20, 36396), (26, 36315), (35, 36267), (37, 36246), (42, 36201), (47, 36165),