

Pham 308748



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 308748 Report

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

Pham number 308748 has 51 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Upyo_14
- Track 2 : Mahdia_14
- Track 3 : Applejacks_14
- Track 4 : Widow_14
- Track 5 : Trine_14
- Track 6 : Morrissey_15
- Track 7 : Gustav_14
- Track 8 : Poppers_14
- Track 9 : Opie_14, Eyes_14
- Track 10 : Opie_16, Bowser_16, Eyes_16
- Track 11 : Bowser_14, Schnabeltier_14, MagicMan_14
- Track 12 : Bunker_16
- Track 13 : Bunker_14
- Track 14 : Schnabeltier_16, Jecs_17, MagicMan_16
- Track 15 : GEazy_14, NaLuna_14, HannahD_14
- Track 16 : GEazy_16, NaLuna_16, HannahD_16
- Track 17 : ZAYM_14, TaronosaurusRx_14
- Track 18 : DirtyBoi_15
- Track 19 : Hedwig_15
- Track 20 : Hedwig_17, DirtyBoi_17
- Track 21 : TaronosaurusRx_16, ZAYM_16
- Track 22 : BackstagePass_14
- Track 23 : BackstagePass_16
- Track 24 : BBQValindra_16
- Track 25 : BBQValindra_14
- Track 26 : Kiko_17
- Track 27 : Kiko_16
- Track 28 : Malibo_16
- Track 29 : Jojo24_14
- Track 30 : DearBasketball_16
- Track 31 : Heinz_14
- Track 32 : Reyja_15, DinoNuggs_15
- Track 33 : Santhid_14
- Track 34 : Tarzan_14, DonkeyMan_14
- Track 35 : Hibiscus_14

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

The start number called the most often in the published annotations is 30, it was called in 13 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BBQValindra_16, BackstagePass_16, Bowser_16, Bunker_16, DirtyBoi_17, Eyes_16, GEazy_16, HannahD_16, Hedwig_17, Jecs_17, Kiko_17, MagicMan_16, NaLuna_16, Opie_16, Schnabeltier_16, TaronosaurusRx_16, ZAYM_16,

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

- Hibiscus_14, Jojo24_14,

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

- Applejacks_14, BBQValindra_14, BackstagePass_14, Bowser_14, Bunker_14, DearBasketball_16, DinoNuggs_15, DirtyBoi_15, DonkeyMan_14, Eyes_14, GEazy_14, Gustav_14, HannahD_14, Hedwig_15, Heinz_14, Kiko_16, MagicMan_14, Mahdia_14, Malibo_16, Morrissey_15, NaLuna_14, Opie_14, Puppies_14, Reyja_15, Santhid_14, Schnabeltier_14, TaronosaurusRx_14, Tarzan_14, Trine_14, Upyo_14, Widow_14, ZAYM_14,

Summary by start number:

Start 17:

- Found in 9 of 51 (17.6%) of genes in pham
- Manual Annotations of this start: 7 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DearBasketball_16 (DY), DinoNuggs_15 (DY), DonkeyMan_14 (DY), Heinz_14 (DY), Hibiscus_14 (DY), Jojo24_14 (DY), Reyja_15 (DY), Santhid_14 (DY), Tarzan_14 (DY),

Start 18:

- Found in 1 of 51 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kiko_16 (DB),

Start 19:

- Found in 1 of 51 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Malibo_16 (DW),

Start 20:

- Found in 2 of 51 (3.9%) of genes in pham
- Manual Annotations of this start: 2 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Puppies_14 (CD), Widow_14 (CD),

Start 21:

- Found in 6 of 51 (11.8%) of genes in pham
- Manual Annotations of this start: 5 of 41

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Applejacks_14 (CD), Gustav_14 (CD), Mahdia_14 (CD), Morrissey_15 (CD), Trine_14 (CD), Upyo_14 (CD),

Start 25:

- Found in 16 of 51 (31.4%) of genes in pham
- Manual Annotations of this start: 12 of 41
- Called 93.8% of time when present
- Phage (with cluster) where this start called: BBQValindra_14 (DB), BackstagePass_14 (DB), Bowser_14 (DB), Bunker_14 (DB), DirtyBoi_15 (DB), Eyes_14 (DB), GEazy_14 (DB), HannahD_14 (DB), Hedwig_15 (DB), MagicMan_14 (DB), NaLuna_14 (DB), Opie_14 (DB), Schnabeltier_14 (DB), TaronosaurusRx_14 (DB), ZAYM_14 (DB),

Start 30:

- Found in 19 of 51 (37.3%) of genes in pham
- Manual Annotations of this start: 13 of 41
- Called 89.5% of time when present
- Phage (with cluster) where this start called: BBQValindra_16 (DB), BackstagePass_16 (DB), Bowser_16 (DB), Bunker_16 (DB), DirtyBoi_17 (DB), Eyes_16 (DB), GEazy_16 (DB), HannahD_16 (DB), Hedwig_17 (DB), Jecs_17 (DB), Kiko_17 (DB), MagicMan_16 (DB), NaLuna_16 (DB), Opie_16 (DB), Schnabeltier_16 (DB), TaronosaurusRx_16 (DB), ZAYM_16 (DB),

Summary by clusters:

There are 4 clusters represented in this pham: DW, CD, DB, DY,

Info for manual annotations of cluster CD:

- Start number 20 was manually annotated 2 times for cluster CD.
- Start number 21 was manually annotated 5 times for cluster CD.

Info for manual annotations of cluster DB:

- Start number 18 was manually annotated 1 time for cluster DB.
- Start number 25 was manually annotated 12 times for cluster DB.
- Start number 30 was manually annotated 13 times for cluster DB.

Info for manual annotations of cluster DW:

- Start number 19 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster DY:

- Start number 17 was manually annotated 7 times for cluster DY.

Gene Information:

Gene: Applejacks_14 Start: 8761, Stop: 9270, Start Num: 21

Candidate Starts for Applejacks_14:

(Start: 21 @8761 has 5 MA's), (27, 8806), (40, 8935), (48, 9010), (49, 9013), (51, 9031), (53, 9037), (57, 9061), (67, 9145), (74, 9184),

Gene: BBQValindra_16 Start: 10101, Stop: 10535, Start Num: 30

Candidate Starts for BBQValindra_16:

(Start: 30 @10101 has 13 MA's), (52, 10290), (53, 10293), (55, 10302), (61, 10362), (75, 10455), (80, 10503),

Gene: BBQValindra_14 Start: 9257, Stop: 9673, Start Num: 25

Candidate Starts for BBQValindra_14:

(Start: 25 @9257 has 12 MA's), (32, 9323), (34, 9326), (49, 9416), (58, 9476), (78, 9623), (82, 9653),

Gene: BackstagePass_14 Start: 9234, Stop: 9650, Start Num: 25

Candidate Starts for BackstagePass_14:

(Start: 25 @9234 has 12 MA's), (32, 9300), (34, 9303), (49, 9393), (58, 9453), (82, 9630),

Gene: BackstagePass_16 Start: 10076, Stop: 10513, Start Num: 30

Candidate Starts for BackstagePass_16:

(Start: 30 @10076 has 13 MA's), (52, 10268), (53, 10271), (54, 10274), (55, 10280), (75, 10433), (78, 10469), (80, 10481),

Gene: Bowser_14 Start: 9259, Stop: 9681, Start Num: 25

Candidate Starts for Bowser_14:

(Start: 25 @9259 has 12 MA's), (32, 9328), (34, 9331), (49, 9424), (53, 9448), (58, 9484), (64, 9529), (77, 9628), (78, 9631), (79, 9634), (82, 9661),

Gene: Bowser_16 Start: 10107, Stop: 10541, Start Num: 30

Candidate Starts for Bowser_16:

(Start: 30 @10107 has 13 MA's), (52, 10296), (53, 10299), (54, 10302), (55, 10308), (61, 10368), (75, 10461), (80, 10509),

Gene: Bunker_16 Start: 10101, Stop: 10535, Start Num: 30

Candidate Starts for Bunker_16:

(Start: 30 @10101 has 13 MA's), (51, 10287), (52, 10290), (53, 10293), (55, 10302), (61, 10362), (75, 10455), (76, 10473), (80, 10503),

Gene: Bunker_14 Start: 9257, Stop: 9673, Start Num: 25

Candidate Starts for Bunker_14:

(Start: 25 @9257 has 12 MA's), (32, 9323), (34, 9326), (47, 9395), (49, 9416), (64, 9521), (72, 9578), (78, 9623), (82, 9653),

Gene: DearBasketball_16 Start: 9143, Stop: 9706, Start Num: 17

Candidate Starts for DearBasketball_16:

(Start: 17 @9143 has 7 MA's), (43, 9389), (58, 9488), (61, 9521), (71, 9593), (73, 9611),

Gene: DinoNuggs_15 Start: 9079, Stop: 9672, Start Num: 17

Candidate Starts for DinoNuggs_15:

(Start: 17 @9079 has 7 MA's), (28, 9184), (39, 9319), (43, 9364), (58, 9454), (73, 9577),

Gene: DirtyBoi_15 Start: 9613, Stop: 10107, Start Num: 25

Candidate Starts for DirtyBoi_15:

(Start: 25 @9613 has 12 MA's), (43, 9817), (54, 9877), (57, 9898), (58, 9910), (62, 9946), (64, 9955), (67, 9982),

Gene: DirtyBoi_17 Start: 10533, Stop: 10952, Start Num: 30

Candidate Starts for DirtyBoi_17:

(Start: 30 @10533 has 13 MA's), (54, 10713), (62, 10782), (75, 10872),

Gene: DonkeyMan_14 Start: 8928, Stop: 9542, Start Num: 17

Candidate Starts for DonkeyMan_14:

(Start: 17 @8928 has 7 MA's), (24, 9024), (43, 9225), (58, 9324), (61, 9357), (70, 9426), (73, 9447),

Gene: Eyes_16 Start: 10115, Stop: 10549, Start Num: 30

Candidate Starts for Eyes_16:

(Start: 30 @10115 has 13 MA's), (52, 10304), (53, 10307), (54, 10310), (55, 10316), (61, 10376), (75, 10469), (80, 10517),

Gene: Eyes_14 Start: 9267, Stop: 9689, Start Num: 25

Candidate Starts for Eyes_14:

(Start: 25 @9267 has 12 MA's), (32, 9336), (34, 9339), (49, 9432), (53, 9456), (58, 9492), (64, 9537), (72, 9594), (77, 9636), (78, 9639), (79, 9642), (82, 9669),

Gene: GEazy_14 Start: 9276, Stop: 9695, Start Num: 25

Candidate Starts for GEazy_14:

(Start: 25 @9276 has 12 MA's), (32, 9345), (34, 9348), (49, 9438), (58, 9498), (64, 9543), (72, 9600), (78, 9645),

Gene: GEazy_16 Start: 10123, Stop: 10557, Start Num: 30

Candidate Starts for GEazy_16:

(Start: 30 @10123 has 13 MA's), (51, 10309), (52, 10312), (55, 10324), (61, 10384), (75, 10477), (80, 10525),

Gene: Gustav_14 Start: 8845, Stop: 9381, Start Num: 21

Candidate Starts for Gustav_14:

(Start: 21 @8845 has 5 MA's), (27, 8887), (33, 8959), (37, 8980), (39, 9040), (48, 9121), (53, 9148), (54, 9151), (60, 9214),

Gene: HannahD_16 Start: 10123, Stop: 10557, Start Num: 30

Candidate Starts for HannahD_16:

(Start: 30 @10123 has 13 MA's), (51, 10309), (52, 10312), (55, 10324), (61, 10384), (75, 10477), (80, 10525),

Gene: HannahD_14 Start: 9276, Stop: 9695, Start Num: 25

Candidate Starts for HannahD_14:

(Start: 25 @9276 has 12 MA's), (32, 9345), (34, 9348), (49, 9438), (58, 9498), (64, 9543), (72, 9600), (78, 9645),

Gene: Hedwig_15 Start: 9612, Stop: 10103, Start Num: 25

Candidate Starts for Hedwig_15:

(Start: 25 @9612 has 12 MA's), (43, 9813), (54, 9873), (57, 9894), (58, 9906), (62, 9942), (64, 9951), (67, 9978),

Gene: Hedwig_17 Start: 10529, Stop: 10948, Start Num: 30

Candidate Starts for Hedwig_17:

(Start: 30 @10529 has 13 MA's), (54, 10709), (62, 10778), (75, 10868),

Gene: Heinz_14 Start: 8959, Stop: 9483, Start Num: 17

Candidate Starts for Heinz_14:

(1, 7540), (2, 7555), (3, 7579), (4, 7678), (5, 7738), (6, 7918), (7, 7987), (8, 8092), (9, 8146), (10, 8170), (13, 8551), (14, 8572), (Start: 17 @8959 has 7 MA's), (44, 9166), (58, 9265), (61, 9298), (70, 9367),

(73, 9388),

Gene: Hibiscus_14 Start: 8943, Stop: 9500, Start Num: 17

Candidate Starts for Hibiscus_14:

(11, 8517), (12, 8526), (Start: 17 @8943 has 7 MA's), (Start: 30 @9048 has 13 MA's), (43, 9192), (58, 9282), (61, 9315), (71, 9387), (73, 9405),

Gene: Jecs_17 Start: 10439, Stop: 10873, Start Num: 30

Candidate Starts for Jecs_17:

(Start: 30 @10439 has 13 MA's), (52, 10628), (53, 10631), (54, 10634), (55, 10640), (75, 10793), (80, 10841),

Gene: Jojo24_14 Start: 8937, Stop: 9494, Start Num: 17

Candidate Starts for Jojo24_14:

(Start: 17 @8937 has 7 MA's), (Start: 30 @9042 has 13 MA's), (43, 9186), (58, 9276), (61, 9309), (71, 9381), (73, 9399),

Gene: Kiko_17 Start: 10399, Stop: 10821, Start Num: 30

Candidate Starts for Kiko_17:

(Start: 30 @10399 has 13 MA's), (51, 10573), (54, 10582), (62, 10651), (75, 10741),

Gene: Kiko_16 Start: 9458, Stop: 9973, Start Num: 18

Candidate Starts for Kiko_16:

(Start: 18 @9458 has 1 MA's), (22, 9494), (23, 9497), (Start: 25 @9515 has 12 MA's), (56, 9752), (58, 9776), (62, 9812), (64, 9821), (65, 9824), (68, 9854), (76, 9905), (82, 9953),

Gene: MagicMan_14 Start: 9597, Stop: 10025, Start Num: 25

Candidate Starts for MagicMan_14:

(Start: 25 @9597 has 12 MA's), (32, 9666), (34, 9669), (49, 9768), (53, 9792), (58, 9828), (64, 9873), (77, 9972), (78, 9975), (79, 9978), (82, 10005),

Gene: MagicMan_16 Start: 10451, Stop: 10885, Start Num: 30

Candidate Starts for MagicMan_16:

(Start: 30 @10451 has 13 MA's), (52, 10640), (53, 10643), (54, 10646), (55, 10652), (75, 10805), (80, 10853),

Gene: Mahdia_14 Start: 8824, Stop: 9300, Start Num: 21

Candidate Starts for Mahdia_14:

(Start: 21 @8824 has 5 MA's), (27, 8866), (49, 9043), (52, 9064), (53, 9067), (54, 9070), (57, 9091), (63, 9142), (81, 9268),

Gene: Malibo_16 Start: 9627, Stop: 10175, Start Num: 19

Candidate Starts for Malibo_16:

(Start: 19 @9627 has 1 MA's), (42, 9828), (55, 9936), (58, 9963), (76, 10107),

Gene: Morrissey_15 Start: 9186, Stop: 9728, Start Num: 21

Candidate Starts for Morrissey_15:

(Start: 21 @9186 has 5 MA's), (27, 9228), (33, 9300), (35, 9306), (36, 9315), (49, 9471), (53, 9495), (54, 9498),

Gene: NaLuna_14 Start: 9276, Stop: 9695, Start Num: 25

Candidate Starts for NaLuna_14:

(Start: 25 @9276 has 12 MA's), (32, 9345), (34, 9348), (49, 9438), (58, 9498), (64, 9543), (72, 9600), (78, 9645),

Gene: NaLuna_16 Start: 10123, Stop: 10557, Start Num: 30

Candidate Starts for NaLuna_16:

(Start: 30 @10123 has 13 MA's), (51, 10309), (52, 10312), (55, 10324), (61, 10384), (75, 10477), (80, 10525),

Gene: Opie_14 Start: 9611, Stop: 10033, Start Num: 25

Candidate Starts for Opie_14:

(Start: 25 @9611 has 12 MA's), (32, 9680), (34, 9683), (49, 9776), (53, 9800), (58, 9836), (64, 9881), (72, 9938), (77, 9980), (78, 9983), (79, 9986), (82, 10013),

Gene: Opie_16 Start: 10459, Stop: 10893, Start Num: 30

Candidate Starts for Opie_16:

(Start: 30 @10459 has 13 MA's), (52, 10648), (53, 10651), (54, 10654), (55, 10660), (61, 10720), (75, 10813), (80, 10861),

Gene: Puppies_14 Start: 8726, Stop: 9256, Start Num: 20

Candidate Starts for Puppies_14:

(15, 8477), (Start: 20 @8726 has 2 MA's), (27, 8768), (29, 8795), (31, 8813), (53, 9023), (57, 9047), (66, 9122), (73, 9167), (74, 9170),

Gene: Reyja_15 Start: 9079, Stop: 9672, Start Num: 17

Candidate Starts for Reyja_15:

(Start: 17 @9079 has 7 MA's), (28, 9184), (39, 9319), (43, 9364), (58, 9454), (73, 9577),

Gene: Santhid_14 Start: 8945, Stop: 9502, Start Num: 17

Candidate Starts for Santhid_14:

(Start: 17 @8945 has 7 MA's), (43, 9194), (58, 9284), (61, 9317), (71, 9389), (73, 9407),

Gene: Schnabeltier_16 Start: 10452, Stop: 10886, Start Num: 30

Candidate Starts for Schnabeltier_16:

(Start: 30 @10452 has 13 MA's), (52, 10641), (53, 10644), (54, 10647), (55, 10653), (75, 10806), (80, 10854),

Gene: Schnabeltier_14 Start: 9598, Stop: 10026, Start Num: 25

Candidate Starts for Schnabeltier_14:

(Start: 25 @9598 has 12 MA's), (32, 9667), (34, 9670), (49, 9769), (53, 9793), (58, 9829), (64, 9874), (77, 9973), (78, 9976), (79, 9979), (82, 10006),

Gene: TaronosaurusRx_16 Start: 10458, Stop: 10892, Start Num: 30

Candidate Starts for TaronosaurusRx_16:

(Start: 30 @10458 has 13 MA's), (52, 10647), (54, 10653), (55, 10659), (61, 10719), (73, 10806), (75, 10812), (80, 10860),

Gene: TaronosaurusRx_14 Start: 9610, Stop: 10032, Start Num: 25

Candidate Starts for TaronosaurusRx_14:

(Start: 25 @9610 has 12 MA's), (32, 9679), (49, 9775), (58, 9835), (73, 9943), (82, 10012),

Gene: Tarzan_14 Start: 8933, Stop: 9547, Start Num: 17

Candidate Starts for Tarzan_14:

(Start: 17 @8933 has 7 MA's), (24, 9029), (43, 9230), (58, 9329), (61, 9362), (70, 9431), (73, 9452),

Gene: Trine_14 Start: 8732, Stop: 9235, Start Num: 21

Candidate Starts for Trine_14:

(Start: 21 @8732 has 5 MA's), (26, 8768), (38, 8867), (45, 8948), (51, 8996), (53, 9002), (59, 9053), (63, 9077),

Gene: Upyo_14 Start: 8842, Stop: 9366, Start Num: 21

Candidate Starts for Upyo_14:

(16, 8647), (Start: 21 @8842 has 5 MA's), (46, 9082), (50, 9121), (52, 9130), (60, 9199), (66, 9232), (69, 9253),

Gene: Widow_14 Start: 8717, Stop: 9247, Start Num: 20

Candidate Starts for Widow_14:

(15, 8468), (Start: 20 @8717 has 2 MA's), (27, 8759), (29, 8786), (31, 8804), (41, 8918), (53, 9014), (57, 9038), (66, 9113), (73, 9158), (74, 9161),

Gene: ZAYM_14 Start: 9602, Stop: 10024, Start Num: 25

Candidate Starts for ZAYM_14:

(Start: 25 @9602 has 12 MA's), (32, 9671), (49, 9767), (58, 9827), (73, 9935), (82, 10004),

Gene: ZAYM_16 Start: 10450, Stop: 10884, Start Num: 30

Candidate Starts for ZAYM_16:

(Start: 30 @10450 has 13 MA's), (52, 10639), (54, 10645), (55, 10651), (61, 10711), (73, 10798), (75, 10804), (80, 10852),