

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 296684 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296684 has 46 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Rockstar_76
- Track 2 : Isca_84
- Track 3 : Phantastic_88
- Track 4 : BabyRay_88
- Track 5 : DrManhattan_47, Adolin_48
- Track 6 : PandaPo_48, MissSwiss_48
- Track 7 : Reedo_47
- Track 8 : Tallboi_47
- Track 9 : Soondubu_41
- Track 10 : Cardigan_207
- Track 11 : Yvonnetastic_202
- Track 12 : JonJames_201
- Track 13 : Guey18_81
- Track 14 : Keelan_73
- Track 15 : Ziko_79, Ronaldo_79, Volt_79, Fryberger_75
- Track 16 : Honk_75
- Track 17 : GardenState_70
- Track 18 : Cen1621_67
- Track 19 : IAmGroot_69
- Track 20 : Ellewin_18, KSunshine22_311, Ellewin_311, Artu_19, DunneganBoMo_313, WaddleDee_308, Artu_306, WaddleDee_17, DunneganBoMo_18, KSunshine22_19
- Track 21 : Emmetator_312, Emmetator_18, BooTeria_320, BooTeria_21
- Track 22 : Panchaali_18, Panchaali_305
- Track 23 : Stewart25555_17
- Track 24 : Jankie_45, GrimEater_43
- Track 25 : CallinAllBarbz_46
- Track 26 : BaileyBlu_46
- Track 27 : Kumao_116

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

The start number called the most often in the published annotations is 6, it was called in 8 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artu_19, Artu_306, BooTeria_21, BooTeria_320, DunneganBoMo_18, DunneganBoMo_313, Ellewin_18, Ellewin_311, Emmetator_18, Emmetator_312, KSunshine22_19, KSunshine22_311, Panchaali_18, Panchaali_305, WaddleDee_17, WaddleDee_308,

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

- Stewart25555_17,

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

- Adolin_48, BabyRay_88, BaileyBlu_46, CallinAllBarbz_46, Cardigan_207, Cen1621_67, DrManhattan_47, Fryberger_75, GardenState_70, GrimEater_43, Guey18_81, Honk_75, IAmGroot_69, Isca_84, Jankie_45, JonJames_201, Keelan_73, Kumao_116, MissSwiss_48, PandaPo_48, Phantastic_88, Reedo_47, Rockstar_76, Ronaldo_79, Soondubu_41, Tallboi_47, Volt_79, Yvonnestic_202, Ziko_79,

Summary by start number:

Start 6:

- Found in 17 of 46 (37.0%) of genes in pham
- Manual Annotations of this start: 8 of 33
- Called 94.1% of time when present
- Phage (with cluster) where this start called: Artu_19 (FC), Artu_306 (FC), BooTeria_21 (FC), BooTeria_320 (FC), DunneganBoMo_18 (FC), DunneganBoMo_313 (FC), Ellewin_18 (FC), Ellewin_311 (FC), Emmetator_18 (FC), Emmetator_312 (FC), KSunshine22_19 (FC), KSunshine22_311 (FC), Panchaali_18 (FC), Panchaali_305 (FC), WaddleDee_17 (FC), WaddleDee_308 (FC),

Start 7:

- Found in 17 of 46 (37.0%) of genes in pham
- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Stewart25555_17 (FC),

Start 8:

- Found in 3 of 46 (6.5%) of genes in pham
- Manual Annotations of this start: 2 of 33
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phantastic_88 (A3), Rockstar_76 (A3),

Start 12:

- Found in 7 of 46 (15.2%) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 71.4% of time when present
- Phage (with cluster) where this start called: BabyRay_88 (A3), Cardigan_207 (DD), Isca_84 (A3), JonJames_201 (DD), Yvonnestic_202 (DD),

Start 13:

- Found in 1 of 46 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Kumao_116 (singleton),

Start 15:

- Found in 6 of 46 (13.0%) of genes in pham
- Manual Annotations of this start: 6 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fryberger_75 (DP), Guey18_81 (DP), Keelan_73 (DP), Ronaldo_79 (DP), Volt_79 (DP), Ziko_79 (DP),

Start 24:

- Found in 3 of 46 (6.5%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Honk_75 (EH),

Start 25:

- Found in 2 of 46 (4.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GrimEater_43 (FP), Jankie_45 (FP),

Start 26:

- Found in 1 of 46 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cen1621_67 (EH),

Start 27:

- Found in 2 of 46 (4.3%) of genes in pham
- Manual Annotations of this start: 2 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GardenState_70 (EH), IAmGroot_69 (EH),

Start 28:

- Found in 6 of 46 (13.0%) of genes in pham
- Manual Annotations of this start: 5 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adolin_48 (AZ1), DrManhattan_47 (AZ1), MissSwiss_48 (AZ1), PandaPo_48 (AZ1), Reedo_47 (AZ1), Tallboi_47 (AZ1),

Start 29:

- Found in 3 of 46 (6.5%) of genes in pham
- Manual Annotations of this start: 3 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaileyBlu_46 (FP), CallinAllBarbz_46 (FP), Soondubu_41 (AZ6),

Summary by clusters:

There are 9 clusters represented in this pham: FP, singleton, EH, DD, A3, FC, AZ6, AZ1, DP,

Info for manual annotations of cluster A3:

- Start number 8 was manually annotated 2 times for cluster A3.
- Start number 12 was manually annotated 2 times for cluster A3.

Info for manual annotations of cluster AZ1:

- Start number 28 was manually annotated 5 times for cluster AZ1.

Info for manual annotations of cluster AZ6:

- Start number 29 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster DD:

- Start number 12 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DP:

- Start number 15 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster EH:

- Start number 24 was manually annotated 1 time for cluster EH.
- Start number 26 was manually annotated 1 time for cluster EH.
- Start number 27 was manually annotated 2 times for cluster EH.

Info for manual annotations of cluster FC:

- Start number 6 was manually annotated 8 times for cluster FC.

Info for manual annotations of cluster FP:

- Start number 29 was manually annotated 2 times for cluster FP.

Gene Information:

Gene: Adolin_48 Start: 33121, Stop: 33456, Start Num: 28

Candidate Starts for Adolin_48:

(14, 33067), (Start: 28 @33121 has 5 MA's),

Gene: Artu_19 Start: 7846, Stop: 8343, Start Num: 6

Candidate Starts for Artu_19:

(Start: 6 @7846 has 8 MA's), (7, 7852), (39, 8044), (46, 8089), (59, 8215),

Gene: Artu_306 Start: 187000, Stop: 187497, Start Num: 6

Candidate Starts for Artu_306:

(Start: 6 @187000 has 8 MA's), (7, 187006), (39, 187198), (46, 187243), (59, 187369),

Gene: BabyRay_88 Start: 48407, Stop: 47991, Start Num: 12

Candidate Starts for BabyRay_88:

(1, 48647), (2, 48605), (3, 48551), (Start: 12 @48407 has 4 MA's), (20, 48371), (41, 48257), (56, 48134), (59, 48119), (62, 48089), (69, 48008),

Gene: BaileyBlu_46 Start: 33124, Stop: 33462, Start Num: 29

Candidate Starts for BaileyBlu_46:

(Start: 29 @33124 has 3 MA's), (44, 33235), (65, 33427),

Gene: BooTeria_320 Start: 187340, Stop: 187837, Start Num: 6

Candidate Starts for BooTeria_320:
(Start: 6 @187340 has 8 MA's), (7, 187346), (39, 187538), (46, 187583),

Gene: BooTeria_21 Start: 8431, Stop: 8928, Start Num: 6
Candidate Starts for BooTeria_21:
(Start: 6 @8431 has 8 MA's), (7, 8437), (39, 8629), (46, 8674),

Gene: CallinAllBarbz_46 Start: 33305, Stop: 33643, Start Num: 29
Candidate Starts for CallinAllBarbz_46:
(11, 33239), (Start: 29 @33305 has 3 MA's), (65, 33608),

Gene: Cardigan_207 Start: 98477, Stop: 98064, Start Num: 12
Candidate Starts for Cardigan_207:
(Start: 12 @98477 has 4 MA's), (16, 98456), (30, 98399), (31, 98384), (33, 98360), (35, 98351), (43, 98318), (47, 98273), (53, 98222), (56, 98195), (57, 98189),

Gene: Cen1621_67 Start: 45156, Stop: 45494, Start Num: 26
Candidate Starts for Cen1621_67:
(18, 45129), (22, 45141), (Start: 26 @45156 has 1 MA's), (60, 45399),

Gene: DrManhattan_47 Start: 32688, Stop: 33023, Start Num: 28
Candidate Starts for DrManhattan_47:
(14, 32634), (Start: 28 @32688 has 5 MA's),

Gene: DunneganBoMo_313 Start: 187774, Stop: 188271, Start Num: 6
Candidate Starts for DunneganBoMo_313:
(Start: 6 @187774 has 8 MA's), (7, 187780), (39, 187972), (46, 188017), (59, 188143),

Gene: DunneganBoMo_18 Start: 8362, Stop: 8859, Start Num: 6
Candidate Starts for DunneganBoMo_18:
(Start: 6 @8362 has 8 MA's), (7, 8368), (39, 8560), (46, 8605), (59, 8731),

Gene: Ellewin_18 Start: 8450, Stop: 8947, Start Num: 6
Candidate Starts for Ellewin_18:
(Start: 6 @8450 has 8 MA's), (7, 8456), (39, 8648), (46, 8693), (59, 8819),

Gene: Ellewin_311 Start: 187564, Stop: 188061, Start Num: 6
Candidate Starts for Ellewin_311:
(Start: 6 @187564 has 8 MA's), (7, 187570), (39, 187762), (46, 187807), (59, 187933),

Gene: Emmetator_312 Start: 186566, Stop: 187063, Start Num: 6
Candidate Starts for Emmetator_312:
(Start: 6 @186566 has 8 MA's), (7, 186572), (39, 186764), (46, 186809),

Gene: Emmetator_18 Start: 8266, Stop: 8763, Start Num: 6
Candidate Starts for Emmetator_18:
(Start: 6 @8266 has 8 MA's), (7, 8272), (39, 8464), (46, 8509),

Gene: Fryberger_75 Start: 40522, Stop: 40130, Start Num: 15
Candidate Starts for Fryberger_75:
(9, 40564), (Start: 15 @40522 has 6 MA's), (19, 40507), (21, 40501), (34, 40414), (50, 40306), (54, 40273), (56, 40252), (58, 40240), (59, 40237), (60, 40231), (62, 40207), (67, 40135),

Gene: GardenState_70 Start: 42790, Stop: 43125, Start Num: 27
Candidate Starts for GardenState_70:
(Start: 27 @42790 has 2 MA's),

Gene: GrimEater_43 Start: 31771, Stop: 32124, Start Num: 25
Candidate Starts for GrimEater_43:
(25, 31771), (65, 32089),

Gene: Guey18_81 Start: 41893, Stop: 41501, Start Num: 15
Candidate Starts for Guey18_81:
(9, 41935), (Start: 15 @41893 has 6 MA's), (19, 41878), (21, 41872), (34, 41785), (36, 41779), (50, 41677), (54, 41644), (56, 41623), (59, 41608), (60, 41602), (62, 41578), (67, 41506),

Gene: Honk_75 Start: 46974, Stop: 47339, Start Num: 24
Candidate Starts for Honk_75:
(Start: 24 @46974 has 1 MA's), (38, 47064), (42, 47076), (63, 47274),

Gene: IAmGroot_69 Start: 43001, Stop: 43336, Start Num: 27
Candidate Starts for IAmGroot_69:
(17, 42962), (Start: 27 @43001 has 2 MA's),

Gene: Isca_84 Start: 47705, Stop: 47304, Start Num: 12
Candidate Starts for Isca_84:
(Start: 8 @47741 has 2 MA's), (Start: 12 @47705 has 4 MA's), (20, 47669), (32, 47588), (40, 47558), (45, 47531), (48, 47510), (53, 47471), (59, 47429), (62, 47399),

Gene: Jankie_45 Start: 31949, Stop: 32302, Start Num: 25
Candidate Starts for Jankie_45:
(25, 31949), (65, 32267),

Gene: JonJames_201 Start: 99038, Stop: 98619, Start Num: 12
Candidate Starts for JonJames_201:
(Start: 12 @99038 has 4 MA's), (16, 99014), (Start: 24 @98984 has 1 MA's), (31, 98942), (33, 98918), (51, 98801), (52, 98792), (56, 98759), (57, 98753), (64, 98687),

Gene: KSunshine22_311 Start: 185876, Stop: 186373, Start Num: 6
Candidate Starts for KSunshine22_311:
(Start: 6 @185876 has 8 MA's), (7, 185882), (39, 186074), (46, 186119), (59, 186245),

Gene: KSunshine22_19 Start: 8975, Stop: 9472, Start Num: 6
Candidate Starts for KSunshine22_19:
(Start: 6 @8975 has 8 MA's), (7, 8981), (39, 9173), (46, 9218), (59, 9344),

Gene: Keelan_73 Start: 40361, Stop: 39963, Start Num: 15
Candidate Starts for Keelan_73:
(9, 40403), (Start: 15 @40361 has 6 MA's), (21, 40340), (34, 40253), (50, 40139), (56, 40085), (58, 40073), (61, 40061), (67, 39968),

Gene: Kumao_116 Start: 68785, Stop: 68384, Start Num: 13
Candidate Starts for Kumao_116:
(4, 68875), (5, 68869), (Start: 13 @68785 has 1 MA's), (20, 68752), (37, 68647), (49, 68572), (53, 68551), (55, 68527), (66, 68413), (67, 68407),

Gene: MissSwiss_48 Start: 33199, Stop: 33531, Start Num: 28

Candidate Starts for MissSwiss_48:

(Start: 28 @33199 has 5 MA's), (65, 33505),

Gene: Panchaali_18 Start: 7794, Stop: 8291, Start Num: 6

Candidate Starts for Panchaali_18:

(Start: 6 @7794 has 8 MA's), (7, 7800), (23, 7884), (39, 7992), (46, 8037),

Gene: Panchaali_305 Start: 186852, Stop: 187349, Start Num: 6

Candidate Starts for Panchaali_305:

(Start: 6 @186852 has 8 MA's), (7, 186858), (23, 186942), (39, 187050), (46, 187095),

Gene: PandaPo_48 Start: 33207, Stop: 33539, Start Num: 28

Candidate Starts for PandaPo_48:

(Start: 28 @33207 has 5 MA's), (65, 33513),

Gene: Phantastic_88 Start: 47859, Stop: 47422, Start Num: 8

Candidate Starts for Phantastic_88:

(Start: 8 @47859 has 2 MA's), (Start: 12 @47823 has 4 MA's), (20, 47787), (32, 47706), (40, 47676), (45, 47649), (48, 47628), (53, 47589), (59, 47547), (62, 47517),

Gene: Reedo_47 Start: 32807, Stop: 33139, Start Num: 28

Candidate Starts for Reedo_47:

(Start: 28 @32807 has 5 MA's),

Gene: Rockstar_76 Start: 45549, Stop: 45112, Start Num: 8

Candidate Starts for Rockstar_76:

(Start: 8 @45549 has 2 MA's), (Start: 12 @45513 has 4 MA's), (20, 45477), (32, 45396), (40, 45366), (45, 45339), (48, 45318), (59, 45237), (62, 45207),

Gene: Ronaldo_79 Start: 41666, Stop: 41274, Start Num: 15

Candidate Starts for Ronaldo_79:

(9, 41708), (Start: 15 @41666 has 6 MA's), (19, 41651), (21, 41645), (34, 41558), (50, 41450), (54, 41417), (56, 41396), (58, 41384), (59, 41381), (60, 41375), (62, 41351), (67, 41279),

Gene: Soondubu_41 Start: 34415, Stop: 34756, Start Num: 29

Candidate Starts for Soondubu_41:

(Start: 29 @34415 has 3 MA's), (65, 34718),

Gene: Stewart25555_17 Start: 8261, Stop: 8752, Start Num: 7

Candidate Starts for Stewart25555_17:

(Start: 6 @8255 has 8 MA's), (7, 8261), (23, 8345), (39, 8453), (46, 8498), (55, 8606), (59, 8624),

Gene: Tallboi_47 Start: 35393, Stop: 35728, Start Num: 28

Candidate Starts for Tallboi_47:

(Start: 28 @35393 has 5 MA's), (68, 35717),

Gene: Volt_79 Start: 41830, Stop: 41438, Start Num: 15

Candidate Starts for Volt_79:

(9, 41872), (Start: 15 @41830 has 6 MA's), (19, 41815), (21, 41809), (34, 41722), (50, 41614), (54, 41581), (56, 41560), (58, 41548), (59, 41545), (60, 41539), (62, 41515), (67, 41443),

Gene: WaddleDee_308 Start: 186302, Stop: 186799, Start Num: 6

Candidate Starts for WaddleDee_308:

(Start: 6 @186302 has 8 MA's), (7, 186308), (39, 186500), (46, 186545), (59, 186671),

Gene: WaddleDee_17 Start: 8107, Stop: 8604, Start Num: 6

Candidate Starts for WaddleDee_17:

(Start: 6 @8107 has 8 MA's), (7, 8113), (39, 8305), (46, 8350), (59, 8476),

Gene: Yvonnetastic_202 Start: 96089, Stop: 95670, Start Num: 12

Candidate Starts for Yvonnetastic_202:

(10, 96095), (Start: 12 @96089 has 4 MA's), (16, 96065), (Start: 24 @96035 has 1 MA's), (31, 95993), (33, 95969), (51, 95852), (52, 95843), (56, 95810), (57, 95804), (64, 95738),

Gene: Ziko_79 Start: 41652, Stop: 41260, Start Num: 15

Candidate Starts for Ziko_79:

(9, 41694), (Start: 15 @41652 has 6 MA's), (19, 41637), (21, 41631), (34, 41544), (50, 41436), (54, 41403), (56, 41382), (58, 41370), (59, 41367), (60, 41361), (62, 41337), (67, 41265),