

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 308780 Report

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

Pham number 308780 has 48 members, 15 are drafts.

Phages represented in each track:

- Track 1 : FloraSnap32_71, Patbob_70
- Track 2 : ReginaGlobina_71, LeoJr_71, Atuin_66
- Track 3 : Artu_64
- Track 4 : Racecar_73, Talia1610_72, FrostedClock_75, Mimi_72, Bloom_76
- Track 5 : GoldenEssence_58
- Track 6 : Stewart25555_62
- Track 7 : Panchaali_64
- Track 8 : DunneganBoMo_61, Ellewin_60, WaddleDee_59, BooTeria_68
- Track 9 : Emmetator_64
- Track 10 : SJReid_75
- Track 11 : Chilliams_69
- Track 12 : Rockabye_74
- Track 13 : Phrampa_64
- Track 14 : PauloDiaboli_41, A3Wally_394, PauloDiaboli_396, A3Wally_41
- Track 15 : Dodo_75, PauloDiaboli_73, A3Wally_74
- Track 16 : Dodo_388
- Track 17 : Dodo_42
- Track 18 : Zooman_61
- Track 19 : Big4_43, Big4_369
- Track 20 : Erasmago_382, Erasmago_44
- Track 21 : Erasmago_69
- Track 22 : Zooman_353, Zooman_40
- Track 23 : Big4_65
- Track 24 : Cece_347, Cece_45
- Track 25 : Cece_60
- Track 26 : Pumpernickel_350, Pumpernickel_49
- Track 27 : Pumpernickel_76
- Track 28 : Laure_74

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

The start number called the most often in the published annotations is 13, it was called in 11 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artu_64, Atuin_66, Bloom_76, BooTeria_68, DunneganBoMo_61, Ellewin_60, Emmetator_64, FloraSnap32_71, FrostedClock_75, GoldenEssence_58, Laure_74, LeoJr_71, Mimi_72, Panchaali_64, Patbob_70, Phrampa_64, Racecar_73, ReginaGlobina_71, Stewart25555_62, Talia1610_72, WaddleDee_59,

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

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

- A3Wally_394, A3Wally_41, A3Wally_74, Big4_369, Big4_43, Big4_65, Cece_347, Cece_45, Cece_60, Chilliams_69, Dodo_388, Dodo_42, Dodo_75, Erasmago_382, Erasmago_44, Erasmago_69, PauloDiaboli_396, PauloDiaboli_41, PauloDiaboli_73, Pumpernickel_350, Pumpernickel_49, Pumpernickel_76, Rockabye_74, SJReid_75, Zooman_353, Zooman_40, Zooman_61,

Summary by start number:

Start 3:

- Found in 6 of 48 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Dodo_388 (GD1),

Start 7:

- Found in 6 of 48 (12.5%) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 66.7% of time when present
- Phage (with cluster) where this start called: A3Wally_394 (GD1), A3Wally_41 (GD1), PauloDiaboli_396 (GD1), PauloDiaboli_41 (GD1),

Start 10:

- Found in 6 of 48 (12.5%) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Big4_369 (GD2), Big4_43 (GD2), Erasmago_382 (GD2), Erasmago_44 (GD2), Zooman_353 (GD2), Zooman_40 (GD2),

Start 11:

- Found in 10 of 48 (20.8%) of genes in pham
- Manual Annotations of this start: 5 of 33
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Cece_347 (GD3), Cece_45 (GD3), Dodo_42 (GD1), Pumpernickel_350 (GD4), Pumpernickel_49 (GD4),

Start 12:

- Found in 1 of 48 (2.1%) 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: SJReid_75 (FC),

Start 13:

- Found in 21 of 48 (43.8%) of genes in pham
- Manual Annotations of this start: 11 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artu_64 (FC), Atuin_66 (FC), Bloom_76 (FC), BooTeria_68 (FC), DunneganBoMo_61 (FC), Ellewin_60 (FC), Emmetator_64 (FC), FloraSnap32_71 (FC), FrostedClock_75 (FC), GoldenEssence_58 (FC), Laure_74 (UNK), LeoJr_71 (FC), Mimi_72 (FC), Panchaali_64 (FC), Patbob_70 (FC), Phrampa_64 (FC), Racecar_73 (FC), ReginaGlobina_71 (FC), Stewart25555_62 (FC), Talia1610_72 (FC), WaddleDee_59 (FC),

Start 15:

- Found in 8 of 48 (16.7%) of genes in pham
- Manual Annotations of this start: 7 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_74 (GD1), Big4_65 (GD2), Cece_60 (GD3), Dodo_75 (GD1), Erasmago_69 (GD2), PauloDiaboli_73 (GD1), Pumpnickel_76 (GD4), Zooman_61 (GD2),

Start 16:

- Found in 2 of 48 (4.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chilliams_69 (FC), Rockabye_74 (FC),

Summary by clusters:

There are 6 clusters represented in this pham: GD1, GD2, GD3, GD4, FC, UNK,

Info for manual annotations of cluster FC:

- Start number 12 was manually annotated 1 time for cluster FC.
- Start number 13 was manually annotated 11 times for cluster FC.

Info for manual annotations of cluster GD1:

- Start number 3 was manually annotated 1 time for cluster GD1.
- Start number 7 was manually annotated 4 times for cluster GD1.
- Start number 11 was manually annotated 1 time for cluster GD1.
- Start number 15 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 10 was manually annotated 4 times for cluster GD2.
- Start number 15 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 11 was manually annotated 2 times for cluster GD3.
- Start number 15 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

- Start number 11 was manually annotated 2 times for cluster GD4.
- Start number 15 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_394 Start: 193489, Stop: 194094, Start Num: 7

Candidate Starts for A3Wally_394:

(Start: 3 @193465 has 1 MA's), (Start: 7 @193489 has 4 MA's), (Start: 11 @193537 has 5 MA's), (20, 193582), (32, 193690), (46, 193783), (64, 193954), (67, 193987), (72, 194050), (73, 194059), (74, 194074),

Gene: A3Wally_41 Start: 14268, Stop: 14873, Start Num: 7

Candidate Starts for A3Wally_41:

(Start: 3 @14244 has 1 MA's), (Start: 7 @14268 has 4 MA's), (Start: 11 @14316 has 5 MA's), (20, 14361), (32, 14469), (46, 14562), (64, 14733), (67, 14766), (72, 14829), (73, 14838), (74, 14853),

Gene: A3Wally_74 Start: 26233, Stop: 26730, Start Num: 15

Candidate Starts for A3Wally_74:

(Start: 15 @26233 has 7 MA's), (44, 26467), (59, 26584), (60, 26623), (68, 26710), (69, 26722),

Gene: Artu_64 Start: 26599, Stop: 27093, Start Num: 13

Candidate Starts for Artu_64:

(Start: 13 @26599 has 11 MA's), (27, 26689), (32, 26746), (43, 26818), (57, 26908), (62, 26983), (67, 27043),

Gene: Atuin_66 Start: 29715, Stop: 30212, Start Num: 13

Candidate Starts for Atuin_66:

(Start: 13 @29715 has 11 MA's), (61, 30093), (62, 30102),

Gene: Big4_43 Start: 16447, Stop: 17025, Start Num: 10

Candidate Starts for Big4_43:

(Start: 10 @16447 has 4 MA's), (19, 16498), (30, 16561), (33, 16624), (44, 16693), (51, 16735), (62, 16846), (64, 16873), (67, 16906),

Gene: Big4_369 Start: 191141, Stop: 191719, Start Num: 10

Candidate Starts for Big4_369:

(Start: 10 @191141 has 4 MA's), (19, 191192), (30, 191255), (33, 191318), (44, 191387), (51, 191429), (62, 191540), (64, 191567), (67, 191600),

Gene: Big4_65 Start: 26317, Stop: 26814, Start Num: 15

Candidate Starts for Big4_65:

(Start: 15 @26317 has 7 MA's), (29, 26413), (39, 26524), (59, 26668), (60, 26707), (67, 26779), (68, 26794),

Gene: Bloom_76 Start: 32332, Stop: 32826, Start Num: 13

Candidate Starts for Bloom_76:

(Start: 13 @32332 has 11 MA's), (27, 32428), (30, 32437), (40, 32539), (49, 32599), (62, 32722),

Gene: BooTeria_68 Start: 27054, Stop: 27548, Start Num: 13

Candidate Starts for BooTeria_68:

(Start: 13 @27054 has 11 MA's), (27, 27144), (32, 27201), (43, 27273), (62, 27438), (67, 27498),

Gene: Cece_347 Start: 185392, Stop: 185943, Start Num: 11

Candidate Starts for Cece_347:

(Start: 11 @185392 has 5 MA's), (32, 185545), (33, 185560), (41, 185599), (42, 185605), (50, 185650), (63, 185776), (67, 185827), (71, 185875), (75, 185932),

Gene: Cece_60 Start: 24833, Stop: 25330, Start Num: 15

Candidate Starts for Cece_60:

(Start: 15 @24833 has 7 MA's), (26, 24911), (29, 24929), (48, 25100), (59, 25184), (68, 25310),

Gene: Cece_45 Start: 16958, Stop: 17509, Start Num: 11

Candidate Starts for Cece_45:

(Start: 11 @16958 has 5 MA's), (32, 17111), (33, 17126), (41, 17165), (42, 17171), (50, 17216), (63, 17342), (67, 17393), (71, 17441), (75, 17498),

Gene: Chilliams_69 Start: 32716, Stop: 33210, Start Num: 16

Candidate Starts for Chilliams_69:

(16, 32716), (22, 32761), (39, 32908), (42, 32920), (43, 32929), (57, 33019), (66, 33136),

Gene: Dodo_75 Start: 26555, Stop: 27052, Start Num: 15

Candidate Starts for Dodo_75:

(Start: 15 @26555 has 7 MA's), (44, 26789), (59, 26906), (60, 26945), (68, 27032), (69, 27044),

Gene: Dodo_388 Start: 192291, Stop: 192920, Start Num: 3

Candidate Starts for Dodo_388:

(Start: 3 @192291 has 1 MA's), (Start: 7 @192315 has 4 MA's), (Start: 11 @192363 has 5 MA's), (20, 192408), (32, 192516), (46, 192609), (64, 192780), (67, 192813), (72, 192876), (73, 192885), (74, 192900),

Gene: Dodo_42 Start: 14163, Stop: 14720, Start Num: 11

Candidate Starts for Dodo_42:

(Start: 3 @14091 has 1 MA's), (Start: 7 @14115 has 4 MA's), (Start: 11 @14163 has 5 MA's), (20, 14208), (32, 14316), (46, 14409), (64, 14580), (67, 14613), (72, 14676), (73, 14685), (74, 14700),

Gene: DunneganBoMo_61 Start: 26479, Stop: 26973, Start Num: 13

Candidate Starts for DunneganBoMo_61:

(Start: 13 @26479 has 11 MA's), (27, 26569), (32, 26626), (43, 26698), (62, 26863), (67, 26923),

Gene: Ellewin_60 Start: 26206, Stop: 26700, Start Num: 13

Candidate Starts for Ellewin_60:

(Start: 13 @26206 has 11 MA's), (27, 26296), (32, 26353), (43, 26425), (62, 26590), (67, 26650),

Gene: Emmetator_64 Start: 27226, Stop: 27720, Start Num: 13

Candidate Starts for Emmetator_64:

(Start: 13 @27226 has 11 MA's), (27, 27316), (32, 27373), (43, 27445), (62, 27610), (67, 27670),

Gene: Erasmago_382 Start: 190387, Stop: 190965, Start Num: 10

Candidate Starts for Erasmago_382:

(2, 190300), (5, 190327), (6, 190336), (Start: 10 @190387 has 4 MA's), (17, 190432), (19, 190438), (33, 190564), (43, 190627), (55, 190705), (58, 190720), (63, 190795), (67, 190846), (72, 190909), (73, 190918),

Gene: Erasmago_69 Start: 26079, Stop: 26576, Start Num: 15

Candidate Starts for Erasmago_69:

(Start: 15 @26079 has 7 MA's), (29, 26175), (52, 26373), (59, 26430), (68, 26556),

Gene: Erasmago_44 Start: 15878, Stop: 16456, Start Num: 10

Candidate Starts for Erasmago_44:

(2, 15791), (5, 15818), (6, 15827), (Start: 10 @15878 has 4 MA's), (17, 15923), (19, 15929), (33, 16055), (43, 16118), (55, 16196), (58, 16211), (63, 16286), (67, 16337), (72, 16400), (73, 16409),

Gene: FloraSnap32_71 Start: 30787, Stop: 31281, Start Num: 13

Candidate Starts for FloraSnap32_71:

(9, 30748), (Start: 13 @30787 has 11 MA's), (27, 30883), (30, 30892), (32, 30940), (40, 30994), (44, 31018), (51, 31063), (62, 31177),

Gene: FrostedClock_75 Start: 31820, Stop: 32314, Start Num: 13

Candidate Starts for FrostedClock_75:

(Start: 13 @31820 has 11 MA's), (27, 31916), (30, 31925), (40, 32027), (49, 32087), (62, 32210),

Gene: GoldenEssence_58 Start: 26125, Stop: 26619, Start Num: 13

Candidate Starts for GoldenEssence_58:

(Start: 13 @26125 has 11 MA's), (27, 26221), (30, 26230), (32, 26278), (40, 26332), (62, 26515),

Gene: Laure_74 Start: 32400, Stop: 32894, Start Num: 13

Candidate Starts for Laure_74:

(1, 32268), (4, 32325), (8, 32352), (Start: 13 @32400 has 11 MA's), (21, 32451), (22, 32454), (28, 32499), (43, 32625), (65, 32823),

Gene: LeoJr_71 Start: 29855, Stop: 30352, Start Num: 13

Candidate Starts for LeoJr_71:

(Start: 13 @29855 has 11 MA's), (61, 30233), (62, 30242),

Gene: Mimi_72 Start: 31679, Stop: 32173, Start Num: 13

Candidate Starts for Mimi_72:

(Start: 13 @31679 has 11 MA's), (27, 31775), (30, 31784), (40, 31886), (49, 31946), (62, 32069),

Gene: Panchaali_64 Start: 27332, Stop: 27826, Start Num: 13

Candidate Starts for Panchaali_64:

(Start: 13 @27332 has 11 MA's), (32, 27479), (43, 27551), (62, 27716), (67, 27776),

Gene: Patbob_70 Start: 31972, Stop: 32466, Start Num: 13

Candidate Starts for Patbob_70:

(9, 31933), (Start: 13 @31972 has 11 MA's), (27, 32068), (30, 32077), (32, 32125), (40, 32179), (44, 32203), (51, 32248), (62, 32362),

Gene: PauloDiaboli_41 Start: 14108, Stop: 14713, Start Num: 7

Candidate Starts for PauloDiaboli_41:

(Start: 3 @14084 has 1 MA's), (Start: 7 @14108 has 4 MA's), (Start: 11 @14156 has 5 MA's), (20, 14201), (32, 14309), (46, 14402), (64, 14573), (67, 14606), (72, 14669), (73, 14678), (74, 14693),

Gene: PauloDiaboli_396 Start: 190737, Stop: 191342, Start Num: 7

Candidate Starts for PauloDiaboli_396:

(Start: 3 @190713 has 1 MA's), (Start: 7 @190737 has 4 MA's), (Start: 11 @190785 has 5 MA's), (20, 190830), (32, 190938), (46, 191031), (64, 191202), (67, 191235), (72, 191298), (73, 191307), (74, 191322),

Gene: PauloDiaboli_73 Start: 25590, Stop: 26087, Start Num: 15

Candidate Starts for PauloDiaboli_73:

(Start: 15 @25590 has 7 MA's), (44, 25824), (59, 25941), (60, 25980), (68, 26067), (69, 26079),

Gene: Phrampa_64 Start: 28999, Stop: 29493, Start Num: 13

Candidate Starts for Phrampa_64:

(Start: 13 @28999 has 11 MA's), (27, 29095), (30, 29104), (32, 29152), (40, 29206), (56, 29305), (62, 29389),

Gene: Pumpernickel_350 Start: 183775, Stop: 184356, Start Num: 11

Candidate Starts for Pumpernickel_350:

(9, 183742), (Start: 11 @183775 has 5 MA's), (35, 183967), (46, 184030), (47, 184039), (53, 184081), (54, 184090), (64, 184201), (65, 184207),

Gene: Pumpernickel_76 Start: 29614, Stop: 30117, Start Num: 15

Candidate Starts for Pumpernickel_76:

(14, 29611), (Start: 15 @29614 has 7 MA's), (18, 29644), (23, 29677), (24, 29686), (25, 29689), (30, 29713), (34, 29782), (36, 29806), (37, 29812), (59, 29965), (68, 30091),

Gene: Pumpernickel_49 Start: 17643, Stop: 18224, Start Num: 11

Candidate Starts for Pumpernickel_49:

(9, 17610), (Start: 11 @17643 has 5 MA's), (35, 17835), (46, 17898), (47, 17907), (53, 17949), (54, 17958), (64, 18069), (65, 18075),

Gene: Racecar_73 Start: 32332, Stop: 32826, Start Num: 13

Candidate Starts for Racecar_73:

(Start: 13 @32332 has 11 MA's), (27, 32428), (30, 32437), (40, 32539), (49, 32599), (62, 32722),

Gene: ReginaGlobina_71 Start: 30412, Stop: 30909, Start Num: 13

Candidate Starts for ReginaGlobina_71:

(Start: 13 @30412 has 11 MA's), (61, 30790), (62, 30799),

Gene: Rockabye_74 Start: 33070, Stop: 33555, Start Num: 16

Candidate Starts for Rockabye_74:

(16, 33070), (22, 33115), (30, 33163), (38, 33256), (42, 33274), (43, 33283), (57, 33373), (66, 33490),

Gene: SJReid_75 Start: 33536, Stop: 34036, Start Num: 12

Candidate Starts for SJReid_75:

(Start: 12 @33536 has 1 MA's), (22, 33590), (30, 33641), (32, 33689), (45, 33770), (70, 34016),

Gene: Stewart25555_62 Start: 26737, Stop: 27231, Start Num: 13

Candidate Starts for Stewart25555_62:

(Start: 13 @26737 has 11 MA's), (42, 26947), (43, 26956), (61, 27112), (62, 27121),

Gene: Talia1610_72 Start: 31697, Stop: 32191, Start Num: 13

Candidate Starts for Talia1610_72:

(Start: 13 @31697 has 11 MA's), (27, 31793), (30, 31802), (40, 31904), (49, 31964), (62, 32087),

Gene: WaddleDee_59 Start: 26331, Stop: 26825, Start Num: 13

Candidate Starts for WaddleDee_59:

(Start: 13 @26331 has 11 MA's), (27, 26421), (32, 26478), (43, 26550), (62, 26715), (67, 26775),

Gene: Zooman_61 Start: 24985, Stop: 25482, Start Num: 15

Candidate Starts for Zooman_61:

(Start: 15 @24985 has 7 MA's), (29, 25081), (39, 25192), (59, 25336), (60, 25375), (67, 25447), (68, 25462),

Gene: Zooman_353 Start: 191506, Stop: 192084, Start Num: 10

Candidate Starts for Zooman_353:

(5, 191449), (6, 191458), (Start: 10 @191506 has 4 MA's), (19, 191557), (31, 191641), (33, 191683), (37, 191716), (43, 191746), (44, 191752), (51, 191794), (62, 191905), (64, 191932), (67, 191965), (72, 192028), (75, 192067),

Gene: Zooman_40 Start: 15855, Stop: 16433, Start Num: 10

Candidate Starts for Zooman_40:

(5, 15798), (6, 15807), (Start: 10 @15855 has 4 MA's), (19, 15906), (31, 15990), (33, 16032), (37, 16065), (43, 16095), (44, 16101), (51, 16143), (62, 16254), (64, 16281), (67, 16314), (72, 16377), (75, 16416),