

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 308752 Report

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

Pham number 308752 has 50 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Abidatro_64
- Track 2 : Basilisk_64
- Track 3 : Niblet_61
- Track 4 : Amanises_66, KendraB23_74, Zixiang_63, Shen_61, Eesa_63
- Track 5 : Jamun_61
- Track 6 : Brynnie_61
- Track 7 : TaylorSipht_62
- Track 8 : Chickaboom_63, WileyE_63
- Track 9 : Ruchi_62
- Track 10 : Galaxy_63
- Track 11 : Gravel_74, Pelletreau_74, Orcanus_63
- Track 12 : Toad24_66, Westrich_72
- Track 13 : GramZayde_65, Coral_63
- Track 14 : Lunar_65
- Track 15 : Daob_64
- Track 16 : Kepler_64
- Track 17 : Bible12_67, Cote_66
- Track 18 : Laphuphu24k_61, Rattail_63, DanHam62_63, HamCheese_63, PhluffyCoco_63, Fingolfin_64, Amphitrite_63, AmiCi24_62, Juno112_62, Atlantica_64, Glotell_65
- Track 19 : KHumphrey_64
- Track 20 : Azaz_64, Leona_61
- Track 21 : Camara_63, Oppalora_62
- Track 22 : Andrew_68
- Track 23 : Renna12_63
- Track 24 : AdoptaAdorbs_62
- Track 25 : AlexMinion_63, StuartMinion_53
- Track 26 : Babushka_60
- Track 27 : RedFox_63

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

The start number called the most often in the published annotations is 28, it was called in 18 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdoptaAdorbs_62, AlexMinion_63, AmiCi24_62, Amphitrite_63, Andrew_68, Atlantica_64, Azaz_64, Babushka_60, Camara_63, DanHam62_63, Fingolfin_64, Glotell_65, HamCheese_63, Juno112_62, KHumphrey_64, Laphuphu24k_61, Leona_61, Oppalora_62, PhluffyCoco_63, Rattail_63, RedFox_63, Renna12_63, StuartMinion_53,

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:

- Abidatro_64, Amanises_66, Basilisk_64, Bibble12_67, Brynnie_61, Chickaboom_63, Coral_63, Cote_66, Daob_64, Eesa_63, Galaxy_63, GramZayde_65, Gravel_74, Jamun_61, KendraB23_74, Kepler_64, Lunar_65, Niblet_61, Orcanus_63, Pelletreau_74, Ruchi_62, Shen_61, TaylorSipt_62, Toad24_66, Westrich_72, WileyE_63, Zixiang_63,

Summary by start number:

Start 13:

- Found in 10 of 50 (20.0%) of genes in pham
- Manual Annotations of this start: 5 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amanises_66 (AS1), Eesa_63 (AS1), Gravel_74 (AS1), KendraB23_74 (AS1), Orcanus_63 (AS1), Pelletreau_74 (AS1), Shen_61 (AS1), Toad24_66 (AS1), Westrich_72 (AS1), Zixiang_63 (AS1),

Start 14:

- Found in 1 of 50 (2.0%) 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: TaylorSipt_62 (AS1),

Start 15:

- Found in 4 of 50 (8.0%) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Chickaboom_63 (AS1), WileyE_63 (AS1),

Start 16:

- Found in 5 of 50 (10.0%) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Abidatro_64 (AS1), Galaxy_63 (AS1),

Start 18:

- Found in 1 of 50 (2.0%) 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: Niblet_61 (AS1),

Start 21:

- Found in 1 of 50 (2.0%) 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: Daob_64 (AS2),

Start 22:

- Found in 3 of 50 (6.0%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Ruchi_62 (AS1),

Start 23:

- Found in 2 of 50 (4.0%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Basilisk_64 (AS1),

Start 24:

- Found in 4 of 50 (8.0%) of genes in pham
- Manual Annotations of this start: 3 of 38
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Brynnie_61 (AS1), Jamun_61 (AS1), Kepler_64 (AS2),

Start 25:

- Found in 5 of 50 (10.0%) of genes in pham
- Manual Annotations of this start: 3 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bibble12_67 (AS2), Coral_63 (AS2), Cote_66 (AS2), GramZayde_65 (AS2), Lunar_65 (AS2),

Start 28:

- Found in 23 of 50 (46.0%) of genes in pham
- Manual Annotations of this start: 18 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AdoptaAdorbs_62 (AS3), AlexMinion_63 (AS3), AmiCi24_62 (AS3), Amphitrite_63 (AS3), Andrew_68 (AS3), Atlantica_64 (AS3), Azaz_64 (AS3), Babushka_60 (AS3), Camara_63 (AS3), DanHam62_63 (AS3), Fingolfin_64 (AS3), Glotell_65 (AS3), HamCheese_63 (AS3), Juno112_62 (AS3), KHumphrey_64 (AS3), Laphuphu24k_61 (AS3), Leona_61 (AS3), Oppalora_62 (AS3), PhluffyCoco_63 (AS3), Rattail_63 (AS3), RedFox_63 (AS3), Renna12_63 (AS3), StuartMinion_53 (AS3),

Summary by clusters:

There are 3 clusters represented in this pham: AS3, AS2, AS1,

Info for manual annotations of cluster AS1:

- Start number 13 was manually annotated 5 times for cluster AS1.
- Start number 14 was manually annotated 1 time for cluster AS1.
- Start number 15 was manually annotated 2 times for cluster AS1.
- Start number 16 was manually annotated 2 times for cluster AS1.

- Start number 18 was manually annotated 1 time for cluster AS1.
- Start number 22 was manually annotated 1 time for cluster AS1.
- Start number 23 was manually annotated 1 time for cluster AS1.
- Start number 24 was manually annotated 2 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 21 was manually annotated 1 time for cluster AS2.
- Start number 24 was manually annotated 1 time for cluster AS2.
- Start number 25 was manually annotated 3 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 28 was manually annotated 18 times for cluster AS3.

Gene Information:

Gene: Abidatro_64 Start: 37871, Stop: 38137, Start Num: 16

Candidate Starts for Abidatro_64:

(Start: 15 @37868 has 2 MA's), (Start: 16 @37871 has 2 MA's), (30, 37931), (36, 37988), (48, 38069), (52, 38084),

Gene: AdoptaAdorbs_62 Start: 36481, Stop: 36696, Start Num: 28

Candidate Starts for AdoptaAdorbs_62:

(1, 35959), (2, 35977), (4, 36097), (9, 36376), (10, 36379), (12, 36421), (19, 36448), (27, 36472), (Start: 28 @36481 has 18 MA's), (29, 36496), (32, 36523), (35, 36550), (58, 36688),

Gene: AlexMinion_63 Start: 36156, Stop: 36386, Start Num: 28

Candidate Starts for AlexMinion_63:

(9, 36051), (10, 36054), (12, 36096), (27, 36147), (Start: 28 @36156 has 18 MA's), (29, 36171), (32, 36198), (35, 36225), (50, 36324), (57, 36351), (58, 36363), (62, 36378),

Gene: Amanises_66 Start: 38734, Stop: 39012, Start Num: 13

Candidate Starts for Amanises_66:

(Start: 13 @38734 has 5 MA's), (33, 38830), (39, 38884), (41, 38890), (46, 38935), (59, 38992), (61, 39004), (63, 39007),

Gene: AmiCi24_62 Start: 36590, Stop: 36805, Start Num: 28

Candidate Starts for AmiCi24_62:

(1, 36068), (2, 36086), (4, 36206), (9, 36485), (10, 36488), (12, 36530), (19, 36557), (27, 36581), (Start: 28 @36590 has 18 MA's), (29, 36605), (32, 36632), (35, 36659), (47, 36752), (58, 36797),

Gene: Amphitrite_63 Start: 36480, Stop: 36695, Start Num: 28

Candidate Starts for Amphitrite_63:

(1, 35958), (2, 35976), (4, 36096), (9, 36375), (10, 36378), (12, 36420), (19, 36447), (27, 36471), (Start: 28 @36480 has 18 MA's), (29, 36495), (32, 36522), (35, 36549), (47, 36642), (58, 36687),

Gene: Andrew_68 Start: 37133, Stop: 37360, Start Num: 28

Candidate Starts for Andrew_68:

(9, 37028), (10, 37031), (12, 37073), (Start: 28 @37133 has 18 MA's), (29, 37148), (32, 37175), (60, 37343),

Gene: Atlantica_64 Start: 36592, Stop: 36807, Start Num: 28

Candidate Starts for Atlantica_64:

(1, 36070), (2, 36088), (4, 36208), (9, 36487), (10, 36490), (12, 36532), (19, 36559), (27, 36583),
(Start: 28 @36592 has 18 MA's), (29, 36607), (32, 36634), (35, 36661), (47, 36754), (58, 36799),

Gene: Azaz_64 Start: 36682, Stop: 36897, Start Num: 28

Candidate Starts for Azaz_64:

(2, 36178), (4, 36298), (5, 36517), (9, 36577), (10, 36580), (27, 36673), (Start: 28 @36682 has 18
MA's), (29, 36697), (32, 36724), (35, 36751), (47, 36844), (58, 36889),

Gene: Babushka_60 Start: 36379, Stop: 36597, Start Num: 28

Candidate Starts for Babushka_60:

(9, 36274), (10, 36277), (12, 36319), (27, 36370), (Start: 28 @36379 has 18 MA's), (32, 36421), (35,
36448), (36, 36454), (47, 36541), (49, 36544), (58, 36589),

Gene: Basilisk_64 Start: 37561, Stop: 37818, Start Num: 23

Candidate Starts for Basilisk_64:

(Start: 22 @37558 has 1 MA's), (Start: 23 @37561 has 1 MA's), (29, 37597), (32, 37624), (34, 37645),
(36, 37657), (41, 37690), (42, 37699), (45, 37729), (51, 37750), (54, 37765), (55, 37768), (64, 37810),

Gene: Bible12_67 Start: 36185, Stop: 36433, Start Num: 25

Candidate Starts for Bible12_67:

(Start: 25 @36185 has 3 MA's), (29, 36212), (37, 36278), (56, 36398),

Gene: Brynnie_61 Start: 37395, Stop: 37631, Start Num: 24

Candidate Starts for Brynnie_61:

(11, 37341), (Start: 24 @37395 has 3 MA's), (26, 37401), (29, 37425), (31, 37449), (32, 37452), (34,
37473), (35, 37479), (36, 37485), (41, 37518), (43, 37533), (61, 37623),

Gene: Camara_63 Start: 36483, Stop: 36698, Start Num: 28

Candidate Starts for Camara_63:

(1, 35961), (2, 35979), (4, 36099), (9, 36378), (10, 36381), (12, 36423), (27, 36474), (Start: 28 @36483
has 18 MA's), (29, 36498), (32, 36525), (35, 36552), (47, 36645), (58, 36690),

Gene: Chickaboom_63 Start: 37496, Stop: 37771, Start Num: 15

Candidate Starts for Chickaboom_63:

(Start: 15 @37496 has 2 MA's), (Start: 16 @37499 has 2 MA's), (35, 37610), (40, 37646), (41, 37649),
(52, 37718), (53, 37721), (61, 37763),

Gene: Coral_63 Start: 36092, Stop: 36337, Start Num: 25

Candidate Starts for Coral_63:

(Start: 25 @36092 has 3 MA's), (29, 36119), (37, 36185), (56, 36305), (63, 36332),

Gene: Cote_66 Start: 36528, Stop: 36776, Start Num: 25

Candidate Starts for Cote_66:

(Start: 25 @36528 has 3 MA's), (29, 36555), (37, 36621), (56, 36741),

Gene: DanHam62_63 Start: 36591, Stop: 36806, Start Num: 28

Candidate Starts for DanHam62_63:

(1, 36069), (2, 36087), (4, 36207), (9, 36486), (10, 36489), (12, 36531), (19, 36558), (27, 36582),
(Start: 28 @36591 has 18 MA's), (29, 36606), (32, 36633), (35, 36660), (47, 36753), (58, 36798),

Gene: Daob_64 Start: 35856, Stop: 36119, Start Num: 21

Candidate Starts for Daob_64:

(Start: 21 @35856 has 1 MA's), (Start: 24 @35865 has 3 MA's), (29, 35898), (34, 35946), (37, 35964), (55, 36075), (56, 36084),

Gene: Eesa_63 Start: 38775, Stop: 39053, Start Num: 13

Candidate Starts for Eesa_63:

(Start: 13 @38775 has 5 MA's), (33, 38871), (39, 38925), (41, 38931), (46, 38976), (59, 39033), (61, 39045), (63, 39048),

Gene: Fingolfin_64 Start: 36594, Stop: 36809, Start Num: 28

Candidate Starts for Fingolfin_64:

(1, 36072), (2, 36090), (4, 36210), (9, 36489), (10, 36492), (12, 36534), (19, 36561), (27, 36585), (Start: 28 @36594 has 18 MA's), (29, 36609), (32, 36636), (35, 36663), (47, 36756), (58, 36801),

Gene: Galaxy_63 Start: 36697, Stop: 36963, Start Num: 16

Candidate Starts for Galaxy_63:

(Start: 15 @36694 has 2 MA's), (Start: 16 @36697 has 2 MA's), (Start: 22 @36718 has 1 MA's), (36, 36814), (52, 36913), (61, 36955), (63, 36958),

Gene: Glotell_65 Start: 36638, Stop: 36853, Start Num: 28

Candidate Starts for Glotell_65:

(1, 36116), (2, 36134), (4, 36254), (9, 36533), (10, 36536), (12, 36578), (19, 36605), (27, 36629), (Start: 28 @36638 has 18 MA's), (29, 36653), (32, 36680), (35, 36707), (47, 36800), (58, 36845),

Gene: GramZayde_65 Start: 36364, Stop: 36609, Start Num: 25

Candidate Starts for GramZayde_65:

(Start: 25 @36364 has 3 MA's), (29, 36391), (37, 36457), (56, 36577), (63, 36604),

Gene: Gravel_74 Start: 39031, Stop: 39309, Start Num: 13

Candidate Starts for Gravel_74:

(Start: 13 @39031 has 5 MA's), (37, 39160), (39, 39181), (41, 39187), (46, 39232), (59, 39289), (61, 39301), (63, 39304),

Gene: HamCheese_63 Start: 36578, Stop: 36793, Start Num: 28

Candidate Starts for HamCheese_63:

(1, 36056), (2, 36074), (4, 36194), (9, 36473), (10, 36476), (12, 36518), (19, 36545), (27, 36569), (Start: 28 @36578 has 18 MA's), (29, 36593), (32, 36620), (35, 36647), (47, 36740), (58, 36785),

Gene: Jamun_61 Start: 37765, Stop: 38004, Start Num: 24

Candidate Starts for Jamun_61:

(6, 37639), (Start: 24 @37765 has 3 MA's), (29, 37795), (32, 37822), (33, 37828), (34, 37843), (38, 37870), (42, 37897), (43, 37903), (61, 37996),

Gene: Juno112_62 Start: 36594, Stop: 36809, Start Num: 28

Candidate Starts for Juno112_62:

(1, 36072), (2, 36090), (4, 36210), (9, 36489), (10, 36492), (12, 36534), (19, 36561), (27, 36585), (Start: 28 @36594 has 18 MA's), (29, 36609), (32, 36636), (35, 36663), (47, 36756), (58, 36801),

Gene: KHumphrey_64 Start: 36482, Stop: 36697, Start Num: 28

Candidate Starts for KHumphrey_64:

(2, 35978), (4, 36098), (9, 36377), (10, 36380), (12, 36422), (19, 36449), (27, 36473), (Start: 28 @36482 has 18 MA's), (29, 36497), (32, 36524), (35, 36551), (47, 36644), (58, 36689),

Gene: KendraB23_74 Start: 38736, Stop: 39014, Start Num: 13

Candidate Starts for KendraB23_74:

(Start: 13 @38736 has 5 MA's), (33, 38832), (39, 38886), (41, 38892), (46, 38937), (59, 38994), (61, 39006), (63, 39009),

Gene: Kepler_64 Start: 35869, Stop: 36123, Start Num: 24

Candidate Starts for Kepler_64:

(17, 35839), (20, 35854), (Start: 24 @35869 has 3 MA's), (29, 35902), (34, 35950), (37, 35968), (55, 36079), (56, 36088), (61, 36115),

Gene: Laphuphu24k_61 Start: 36578, Stop: 36793, Start Num: 28

Candidate Starts for Laphuphu24k_61:

(1, 36056), (2, 36074), (4, 36194), (9, 36473), (10, 36476), (12, 36518), (19, 36545), (27, 36569), (Start: 28 @36578 has 18 MA's), (29, 36593), (32, 36620), (35, 36647), (47, 36740), (58, 36785),

Gene: Leona_61 Start: 36683, Stop: 36901, Start Num: 28

Candidate Starts for Leona_61:

(2, 36179), (4, 36299), (5, 36518), (9, 36578), (10, 36581), (27, 36674), (Start: 28 @36683 has 18 MA's), (29, 36698), (32, 36728), (35, 36755), (47, 36848), (58, 36893),

Gene: Lunar_65 Start: 36215, Stop: 36460, Start Num: 25

Candidate Starts for Lunar_65:

(Start: 25 @36215 has 3 MA's), (29, 36242), (34, 36290), (37, 36308), (55, 36419), (56, 36428), (63, 36455),

Gene: Niblet_61 Start: 37971, Stop: 38270, Start Num: 18

Candidate Starts for Niblet_61:

(7, 37875), (8, 37878), (Start: 18 @37971 has 1 MA's), (37, 38097), (54, 38220), (55, 38223),

Gene: Oppalora_62 Start: 36592, Stop: 36807, Start Num: 28

Candidate Starts for Oppalora_62:

(1, 36070), (2, 36088), (4, 36208), (9, 36487), (10, 36490), (12, 36532), (27, 36583), (Start: 28 @36592 has 18 MA's), (29, 36607), (32, 36634), (35, 36661), (47, 36754), (58, 36799),

Gene: Orcanus_63 Start: 38262, Stop: 38540, Start Num: 13

Candidate Starts for Orcanus_63:

(Start: 13 @38262 has 5 MA's), (37, 38391), (39, 38412), (41, 38418), (46, 38463), (59, 38520), (61, 38532), (63, 38535),

Gene: Pelletreau_74 Start: 39031, Stop: 39309, Start Num: 13

Candidate Starts for Pelletreau_74:

(Start: 13 @39031 has 5 MA's), (37, 39160), (39, 39181), (41, 39187), (46, 39232), (59, 39289), (61, 39301), (63, 39304),

Gene: PhluffyCoco_63 Start: 36693, Stop: 36908, Start Num: 28

Candidate Starts for PhluffyCoco_63:

(1, 36171), (2, 36189), (4, 36309), (9, 36588), (10, 36591), (12, 36633), (19, 36660), (27, 36684), (Start: 28 @36693 has 18 MA's), (29, 36708), (32, 36735), (35, 36762), (47, 36855), (58, 36900),

Gene: Rattail_63 Start: 36778, Stop: 36993, Start Num: 28

Candidate Starts for Rattail_63:

(1, 36256), (2, 36274), (4, 36394), (9, 36673), (10, 36676), (12, 36718), (19, 36745), (27, 36769), (Start: 28 @36778 has 18 MA's), (29, 36793), (32, 36820), (35, 36847), (47, 36940), (58, 36985),

Gene: RedFox_63 Start: 36679, Stop: 36906, Start Num: 28

Candidate Starts for RedFox_63:

(9, 36574), (10, 36577), (27, 36670), (Start: 28 @36679 has 18 MA's), (29, 36694), (32, 36721), (35, 36748), (55, 36862), (60, 36889), (62, 36898),

Gene: Renna12_63 Start: 36810, Stop: 37025, Start Num: 28

Candidate Starts for Renna12_63:

(1, 36285), (2, 36303), (3, 36402), (9, 36705), (10, 36708), (12, 36750), (27, 36801), (Start: 28 @36810 has 18 MA's), (29, 36825), (32, 36852), (35, 36879), (47, 36972), (58, 37017),

Gene: Ruchi_62 Start: 37480, Stop: 37740, Start Num: 22

Candidate Starts for Ruchi_62:

(Start: 22 @37480 has 1 MA's), (Start: 23 @37483 has 1 MA's), (29, 37519), (32, 37546), (34, 37567), (36, 37579), (41, 37612), (42, 37621), (45, 37651), (51, 37672), (54, 37687), (55, 37690), (64, 37732),

Gene: Shen_61 Start: 36648, Stop: 36926, Start Num: 13

Candidate Starts for Shen_61:

(Start: 13 @36648 has 5 MA's), (33, 36744), (39, 36798), (41, 36804), (46, 36849), (59, 36906), (61, 36918), (63, 36921),

Gene: StuartMinion_53 Start: 33055, Stop: 33285, Start Num: 28

Candidate Starts for StuartMinion_53:

(9, 32950), (10, 32953), (12, 32995), (27, 33046), (Start: 28 @33055 has 18 MA's), (29, 33070), (32, 33097), (35, 33124), (50, 33223), (57, 33250), (58, 33262), (62, 33277),

Gene: TaylorSipht_62 Start: 37850, Stop: 38122, Start Num: 14

Candidate Starts for TaylorSipht_62:

(Start: 14 @37850 has 1 MA's), (Start: 16 @37853 has 2 MA's), (41, 38003), (59, 38102), (61, 38114), (63, 38117),

Gene: Toad24_66 Start: 38788, Stop: 39063, Start Num: 13

Candidate Starts for Toad24_66:

(Start: 13 @38788 has 5 MA's), (32, 38878), (35, 38905), (38, 38926), (42, 38953), (44, 38977), (45, 38983), (51, 39004),

Gene: Westrich_72 Start: 38955, Stop: 39230, Start Num: 13

Candidate Starts for Westrich_72:

(Start: 13 @38955 has 5 MA's), (32, 39045), (35, 39072), (38, 39093), (42, 39120), (44, 39144), (45, 39150), (51, 39171),

Gene: WileyE_63 Start: 37496, Stop: 37771, Start Num: 15

Candidate Starts for WileyE_63:

(Start: 15 @37496 has 2 MA's), (Start: 16 @37499 has 2 MA's), (35, 37610), (40, 37646), (41, 37649), (52, 37718), (53, 37721), (61, 37763),

Gene: Zixiang_63 Start: 38152, Stop: 38430, Start Num: 13

Candidate Starts for Zixiang_63:

(Start: 13 @38152 has 5 MA's), (33, 38248), (39, 38302), (41, 38308), (46, 38353), (59, 38410), (61, 38422), (63, 38425),