

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 311625 Report

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

Pham number 311625 has 59 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Turuncu_77
- Track 2 : Flapper_77
- Track 3 : Dalilpop_77
- Track 4 : GTE5_62
- Track 5 : GRU1_62
- Track 6 : Emianna_74, Kurt_74, NatB6_74, Wheezy_74, KidneyBean_74, Jifall16_73, Arti_73, Phomeo_73, Foxboro_74
- Track 7 : Buggaboo_76, Bonum_78, SuperSulley_76
- Track 8 : Outis_75, MerCougar_77, StarStruck_75
- Track 9 : Commandaria_74
- Track 10 : Kabluna_77
- Track 11 : NovumRegina_74, GrootJr_76, GTE8_62, Tracker_74
- Track 12 : NosilaM_75
- Track 13 : Float294_76, Ennea_81, Lollipop1437_77
- Track 14 : RedRaider_81
- Track 15 : Patio_75, Skysand_77
- Track 16 : NadineRae_73, IDyn_71, HubbaBubba_69
- Track 17 : Pemberton_75, Sukkupi_73, WhoseManz_73, Marietta_74, Yndexa_73, BiPauneto_76
- Track 18 : HomeFry_80
- Track 19 : Pleakley_83, Fury_83
- Track 20 : Scuba_84
- Track 21 : Braxoaddie_74, Polyyuki_74, Maselop_74, CoffeeBean_74
- Track 22 : Apiary_74
- Track 23 : Gagieri_72
- Track 24 : MacGully_83
- Track 25 : Spartacus_93
- Track 26 : Galactic_87
- Track 27 : Hegedechwinu_87
- Track 28 : Che9d_97
- Track 29 : ChewyVIII_84
- Track 30 : Yappy_114

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 39 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arti_73, BiPauneto_76, Che9d_97, ChewyVIII_84, Commandaria_74, Dalilpop_77, Emianna_74, Ennea_81, Flapper_77, Float294_76, Foxboro_74, Fury_83, GRU1_62, GTE5_62, GTE8_62, Galactic_87, GrootJr_76, Hegedechwinu_87, HomeFry_80, HubbaBubba_69, IDyn_71, Jifall16_73, KidneyBean_74, Kurt_74, Lollipop1437_77, Marietta_74, NadineRae_73, NatB6_74, NovumRegina_74, Patio_75, Pemberton_75, Phomeo_73, Pleakley_83, RedRaider_81, Scuba_84, Skysand_77, Spartacus_93, Sukkupi_73, Tracker_74, Turuncu_77, Wheezy_74, WhoseManz_73, Yappy_114, Yndexa_73,

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:

- Apiary_74, Bonum_78, Braxoaddie_74, Buggaboo_76, CoffeeBean_74, Gagieri_72, Kabluna_77, MacGully_83, Maselop_74, MerCougar_77, NosilaM_75, Outis_75, Polyuyuki_74, StarStruck_75, SuperSulley_76,

Summary by start number:

Start 21:

- Found in 5 of 59 (8.5%) of genes in pham
- Manual Annotations of this start: 5 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apiary_74 (CR6), Braxoaddie_74 (CR6), CoffeeBean_74 (CR6), Maselop_74 (CR6), Polyuyuki_74 (CR6),

Start 26:

- Found in 2 of 59 (3.4%) of genes in pham
- Manual Annotations of this start: 2 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gagieri_72 (CR6), MacGully_83 (CR7),

Start 27:

- Found in 8 of 59 (13.6%) of genes in pham
- Manual Annotations of this start: 8 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bonum_78 (CR2), Buggaboo_76 (CR2), Kabluna_77 (CR2), MerCougar_77 (CR2), NosilaM_75 (CR2), Outis_75 (CR2), StarStruck_75 (CR2), SuperSulley_76 (CR2),

Start 28:

- Found in 44 of 59 (74.6%) of genes in pham
- Manual Annotations of this start: 39 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arti_73 (CR2), BiPauneto_76 (CR4), Che9d_97 (F2), ChewyVIII_84 (singleton), Commandaria_74 (CR2), Dalilpop_77 (CR1), Emianna_74 (CR2), Ennea_81 (CR3), Flapper_77 (CR1), Float294_76 (CR3), Foxboro_74 (CR2), Fury_83 (CR5), GRU1_62 (CR1), GTE5_62 (CR1), GTE8_62

(CR2), Galactic_87 (F1), GrootJr_76 (CR2), Hegedechwinu_87 (F1), HomeFry_80 (CR5), HubbaBubba_69 (CR4), IDyn_71 (CR4), Jifall16_73 (CR2), KidneyBean_74 (CR2), Kurt_74 (CR2), Lollipop1437_77 (CR3), Marietta_74 (CR4), NadineRae_73 (CR4), NatB6_74 (CR2), NovumRegina_74 (CR2), Patio_75 (CR3), Pemberton_75 (CR4), Phomeo_73 (CR2), Pleakley_83 (CR5), RedRaider_81 (CR3), Scuba_84 (CR5), Skysand_77 (CR3), Spartacus_93 (F1), Sukkupi_73 (CR4), Tracker_74 (CR2), Turuncu_77 (CR1), Wheezy_74 (CR2), WhoseManz_73 (CR4), Yappy_114 (singleton), Yndexa_73 (CR4),

Summary by clusters:

There are 10 clusters represented in this pham: CR2, CR3, singleton, CR1, CR6, CR7, CR4, CR5, F2, F1,

Info for manual annotations of cluster CR1:

- Start number 28 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 27 was manually annotated 8 times for cluster CR2.
- Start number 28 was manually annotated 13 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 28 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 28 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 28 was manually annotated 3 times for cluster CR5.

Info for manual annotations of cluster CR6:

- Start number 21 was manually annotated 5 times for cluster CR6.
- Start number 26 was manually annotated 1 time for cluster CR6.

Info for manual annotations of cluster CR7:

- Start number 26 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster F1:

- Start number 28 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 28 was manually annotated 1 time for cluster F2.

Gene Information:

Gene: Apiary_74 Start: 53618, Stop: 53418, Start Num: 21

Candidate Starts for Apiary_74:

(8, 53780), (Start: 21 @53618 has 5 MA's), (30, 53561), (32, 53546), (40, 53444), (43, 53435), (45, 53429),

Gene: Arti_73 Start: 56166, Stop: 55981, Start Num: 28

Candidate Starts for Arti_73:
(Start: 28 @56166 has 39 MA's), (39, 56043),

Gene: BiPauneto_76 Start: 55535, Stop: 55356, Start Num: 28
Candidate Starts for BiPauneto_76:
(Start: 28 @55535 has 39 MA's), (34, 55481), (44, 55391),

Gene: Bonum_78 Start: 57314, Stop: 57138, Start Num: 27
Candidate Starts for Bonum_78:
(Start: 27 @57314 has 8 MA's),

Gene: Braxoaddie_74 Start: 53604, Stop: 53404, Start Num: 21
Candidate Starts for Braxoaddie_74:
(1, 54405), (2, 54354), (3, 54102), (4, 54090), (5, 53997), (8, 53766), (Start: 21 @53604 has 5 MA's),
(30, 53547), (32, 53532), (40, 53430), (43, 53421), (45, 53415),

Gene: Buggaboo_76 Start: 57880, Stop: 57704, Start Num: 27
Candidate Starts for Buggaboo_76:
(Start: 27 @57880 has 8 MA's),

Gene: Che9d_97 Start: 50270, Stop: 50431, Start Num: 28
Candidate Starts for Che9d_97:
(6, 49976), (7, 50009), (9, 50096), (10, 50105), (12, 50117), (15, 50138), (16, 50147), (24, 50240), (25,
50249), (Start: 28 @50270 has 39 MA's), (40, 50402), (43, 50411),

Gene: ChewyVIII_84 Start: 62052, Stop: 61891, Start Num: 28
Candidate Starts for ChewyVIII_84:
(17, 62151), (24, 62085), (Start: 28 @62052 has 39 MA's),

Gene: CoffeeBean_74 Start: 53562, Stop: 53362, Start Num: 21
Candidate Starts for CoffeeBean_74:
(1, 54363), (2, 54312), (3, 54060), (4, 54048), (5, 53955), (8, 53724), (Start: 21 @53562 has 5 MA's),
(30, 53505), (32, 53490), (40, 53388), (43, 53379), (45, 53373),

Gene: Commandaria_74 Start: 57130, Stop: 56963, Start Num: 28
Candidate Starts for Commandaria_74:
(Start: 28 @57130 has 39 MA's), (33, 57079), (36, 57028),

Gene: Dalilpop_77 Start: 58079, Stop: 57915, Start Num: 28
Candidate Starts for Dalilpop_77:
(Start: 28 @58079 has 39 MA's), (33, 58028), (36, 57977), (45, 57929),

Gene: Emianna_74 Start: 57377, Stop: 57192, Start Num: 28
Candidate Starts for Emianna_74:
(Start: 28 @57377 has 39 MA's), (39, 57254),

Gene: Ennea_81 Start: 58543, Stop: 58382, Start Num: 28
Candidate Starts for Ennea_81:
(Start: 28 @58543 has 39 MA's),

Gene: Flapper_77 Start: 57632, Stop: 57468, Start Num: 28
Candidate Starts for Flapper_77:

(11, 57782), (18, 57704), (19, 57695), (22, 57668), (Start: 28 @57632 has 39 MA's), (29, 57620), (33, 57581), (36, 57530), (45, 57482),

Gene: Float294_76 Start: 58449, Stop: 58288, Start Num: 28
Candidate Starts for Float294_76:
(Start: 28 @58449 has 39 MA's),

Gene: Foxboro_74 Start: 57589, Stop: 57404, Start Num: 28
Candidate Starts for Foxboro_74:
(Start: 28 @57589 has 39 MA's), (39, 57466),

Gene: Fury_83 Start: 56305, Stop: 56138, Start Num: 28
Candidate Starts for Fury_83:
(Start: 28 @56305 has 39 MA's), (33, 56254), (36, 56194), (44, 56152),

Gene: GRU1_62 Start: 49477, Stop: 49313, Start Num: 28
Candidate Starts for GRU1_62:
(11, 49627), (18, 49549), (19, 49540), (22, 49513), (Start: 28 @49477 has 39 MA's), (33, 49426), (36, 49375), (45, 49327),

Gene: GTE5_62 Start: 50310, Stop: 50146, Start Num: 28
Candidate Starts for GTE5_62:
(Start: 28 @50310 has 39 MA's), (29, 50298), (33, 50259), (36, 50208), (45, 50160),

Gene: GTE8_62 Start: 50369, Stop: 50184, Start Num: 28
Candidate Starts for GTE8_62:
(Start: 28 @50369 has 39 MA's), (39, 50246),

Gene: Gagieri_72 Start: 53418, Stop: 53260, Start Num: 26
Candidate Starts for Gagieri_72:
(Start: 26 @53418 has 2 MA's),

Gene: Galactic_87 Start: 50180, Stop: 50341, Start Num: 28
Candidate Starts for Galactic_87:
(9, 50006), (10, 50015), (14, 50039), (24, 50150), (25, 50159), (Start: 28 @50180 has 39 MA's), (40, 50312), (43, 50321),

Gene: GrootJr_76 Start: 56771, Stop: 56586, Start Num: 28
Candidate Starts for GrootJr_76:
(Start: 28 @56771 has 39 MA's), (39, 56648),

Gene: Hegedechwinu_87 Start: 49279, Stop: 49440, Start Num: 28
Candidate Starts for Hegedechwinu_87:
(9, 49105), (10, 49114), (14, 49138), (16, 49156), (24, 49249), (25, 49258), (Start: 28 @49279 has 39 MA's), (40, 49411), (43, 49420),

Gene: HomeFry_80 Start: 55361, Stop: 55191, Start Num: 28
Candidate Starts for HomeFry_80:
(23, 55391), (Start: 28 @55361 has 39 MA's), (33, 55310), (35, 55295), (36, 55250), (43, 55208),

Gene: HubbaBubba_69 Start: 52383, Stop: 52204, Start Num: 28
Candidate Starts for HubbaBubba_69:
(Start: 28 @52383 has 39 MA's), (34, 52329), (44, 52239),

Gene: IDyn_71 Start: 53130, Stop: 52951, Start Num: 28
Candidate Starts for IDyn_71:
(Start: 28 @53130 has 39 MA's), (34, 53076), (44, 52986),

Gene: Jifall16_73 Start: 57082, Stop: 56897, Start Num: 28
Candidate Starts for Jifall16_73:
(Start: 28 @57082 has 39 MA's), (39, 56959),

Gene: Kabluna_77 Start: 56643, Stop: 56467, Start Num: 27
Candidate Starts for Kabluna_77:
(Start: 27 @56643 has 8 MA's),

Gene: KidneyBean_74 Start: 57206, Stop: 57021, Start Num: 28
Candidate Starts for KidneyBean_74:
(Start: 28 @57206 has 39 MA's), (39, 57083),

Gene: Kurt_74 Start: 57392, Stop: 57207, Start Num: 28
Candidate Starts for Kurt_74:
(Start: 28 @57392 has 39 MA's), (39, 57269),

Gene: Lollipop1437_77 Start: 58223, Stop: 58062, Start Num: 28
Candidate Starts for Lollipop1437_77:
(Start: 28 @58223 has 39 MA's),

Gene: MacGully_83 Start: 56833, Stop: 56663, Start Num: 26
Candidate Starts for MacGully_83:
(Start: 26 @56833 has 2 MA's), (31, 56812), (36, 56731), (37, 56725), (40, 56698), (41, 56695), (43, 56689),

Gene: Marietta_74 Start: 53430, Stop: 53251, Start Num: 28
Candidate Starts for Marietta_74:
(Start: 28 @53430 has 39 MA's), (34, 53376), (44, 53286),

Gene: Maselop_74 Start: 53638, Stop: 53438, Start Num: 21
Candidate Starts for Maselop_74:
(1, 54439), (2, 54388), (3, 54136), (4, 54124), (5, 54031), (8, 53800), (Start: 21 @53638 has 5 MA's), (30, 53581), (32, 53566), (40, 53464), (43, 53455), (45, 53449),

Gene: MerCougar_77 Start: 58347, Stop: 58171, Start Num: 27
Candidate Starts for MerCougar_77:
(Start: 27 @58347 has 8 MA's), (30, 58317), (45, 58185),

Gene: NadineRae_73 Start: 53039, Stop: 52860, Start Num: 28
Candidate Starts for NadineRae_73:
(Start: 28 @53039 has 39 MA's), (34, 52985), (44, 52895),

Gene: NatB6_74 Start: 56482, Stop: 56297, Start Num: 28
Candidate Starts for NatB6_74:
(Start: 28 @56482 has 39 MA's), (39, 56359),

Gene: NosilaM_75 Start: 56957, Stop: 56781, Start Num: 27
Candidate Starts for NosilaM_75:

(Start: 27 @56957 has 8 MA's),

Gene: NovumRegina_74 Start: 56770, Stop: 56585, Start Num: 28

Candidate Starts for NovumRegina_74:

(Start: 28 @56770 has 39 MA's), (39, 56647),

Gene: Outis_75 Start: 57439, Stop: 57263, Start Num: 27

Candidate Starts for Outis_75:

(Start: 27 @57439 has 8 MA's), (30, 57409), (45, 57277),

Gene: Patio_75 Start: 57280, Stop: 57119, Start Num: 28

Candidate Starts for Patio_75:

(20, 57319), (22, 57310), (Start: 28 @57280 has 39 MA's),

Gene: Pemberton_75 Start: 53610, Stop: 53431, Start Num: 28

Candidate Starts for Pemberton_75:

(Start: 28 @53610 has 39 MA's), (34, 53556), (44, 53466),

Gene: Phomeo_73 Start: 57078, Stop: 56893, Start Num: 28

Candidate Starts for Phomeo_73:

(Start: 28 @57078 has 39 MA's), (39, 56955),

Gene: Pleakley_83 Start: 56306, Stop: 56139, Start Num: 28

Candidate Starts for Pleakley_83:

(Start: 28 @56306 has 39 MA's), (33, 56255), (36, 56195), (44, 56153),

Gene: Polyuyki_74 Start: 53630, Stop: 53430, Start Num: 21

Candidate Starts for Polyuyki_74:

(1, 54431), (2, 54380), (3, 54128), (4, 54116), (5, 54023), (8, 53792), (Start: 21 @53630 has 5 MA's), (30, 53573), (32, 53558), (40, 53456), (43, 53447), (45, 53441),

Gene: RedRaider_81 Start: 59581, Stop: 59420, Start Num: 28

Candidate Starts for RedRaider_81:

(Start: 28 @59581 has 39 MA's), (32, 59551), (38, 59461), (42, 59440),

Gene: Scuba_84 Start: 56379, Stop: 56212, Start Num: 28

Candidate Starts for Scuba_84:

(Start: 28 @56379 has 39 MA's), (33, 56328), (36, 56268), (44, 56226),

Gene: Skysand_77 Start: 57943, Stop: 57782, Start Num: 28

Candidate Starts for Skysand_77:

(20, 57982), (22, 57973), (Start: 28 @57943 has 39 MA's),

Gene: Spartacus_93 Start: 53156, Stop: 53317, Start Num: 28

Candidate Starts for Spartacus_93:

(9, 52982), (10, 52991), (14, 53015), (16, 53033), (24, 53126), (25, 53135), (Start: 28 @53156 has 39 MA's), (40, 53288), (43, 53297),

Gene: StarStruck_75 Start: 57439, Stop: 57263, Start Num: 27

Candidate Starts for StarStruck_75:

(Start: 27 @57439 has 8 MA's), (30, 57409), (45, 57277),

Gene: Sukkupi_73 Start: 55082, Stop: 54903, Start Num: 28

Candidate Starts for Sukkupi_73:
(Start: 28 @55082 has 39 MA's), (34, 55028), (44, 54938),

Gene: SuperSulley_76 Start: 57880, Stop: 57704, Start Num: 27
Candidate Starts for SuperSulley_76:
(Start: 27 @57880 has 8 MA's),

Gene: Tracker_74 Start: 56226, Stop: 56041, Start Num: 28
Candidate Starts for Tracker_74:
(Start: 28 @56226 has 39 MA's), (39, 56103),

Gene: Turuncu_77 Start: 57454, Stop: 57290, Start Num: 28
Candidate Starts for Turuncu_77:
(13, 57601), (18, 57526), (19, 57517), (22, 57490), (Start: 28 @57454 has 39 MA's), (33, 57403), (36, 57352), (45, 57304),

Gene: Wheezy_74 Start: 56440, Stop: 56255, Start Num: 28
Candidate Starts for Wheezy_74:
(Start: 28 @56440 has 39 MA's), (39, 56317),

Gene: WhoseManz_73 Start: 53097, Stop: 52918, Start Num: 28
Candidate Starts for WhoseManz_73:
(Start: 28 @53097 has 39 MA's), (34, 53043), (44, 52953),

Gene: Yappy_114 Start: 57403, Stop: 57242, Start Num: 28
Candidate Starts for Yappy_114:
(Start: 28 @57403 has 39 MA's), (30, 57388), (31, 57382), (32, 57373), (38, 57286),

Gene: Yndexa_73 Start: 55082, Stop: 54903, Start Num: 28
Candidate Starts for Yndexa_73:
(Start: 28 @55082 has 39 MA's), (34, 55028), (44, 54938),