

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 296619 Report

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

Pham number 296619 has 56 members, 17 are drafts.

Phages represented in each track:

- Track 1 : BruhMoment_73
- Track 2 : AWGoat_60
- Track 3 : JellyBread_81
- Track 4 : BlueShadow_82, BillyTP_85
- Track 5 : MidnightRain_90
- Track 6 : Sakai_81, Gorpy_82
- Track 7 : Kabloowy_85, DarwinJr_89
- Track 8 : GumGum_91, CosmicBrownie_83
- Track 9 : CookieBear_83, SonDevVon_92
- Track 10 : BenchScraper_84, Windest_88, Richie_87
- Track 11 : NewKitty_86
- Track 12 : Aikyam_83
- Track 13 : Hestia_78
- Track 14 : SpicyFrank_85
- Track 15 : AdaS_80
- Track 16 : MurphyJoseph_82
- Track 17 : Mapleville_79
- Track 18 : Crescenzo_88
- Track 19 : RadFad_89, Hillester_88, BasketStar_84
- Track 20 : Bhageatrice_88
- Track 21 : Auxilium_82
- Track 22 : Tiff81_79
- Track 23 : MaterMagnus_84
- Track 24 : Seahorse_91
- Track 25 : EvePickles_85
- Track 26 : Raphaella_84, Vopal_85
- Track 27 : MUWow_87
- Track 28 : Globfish_83
- Track 29 : LeBruni_85
- Track 30 : Nyilah_91
- Track 31 : Sporco_86
- Track 32 : Lasker_86
- Track 33 : Phrank15_91
- Track 34 : Anekin_85
- Track 35 : Faja_86
- Track 36 : Isolde_85
- Track 37 : Satrap_83

- Track 38 : YoungHarleezy_85
- Track 39 : Lawnathon_87
- Track 40 : Zucker_85
- Track 41 : Cassini_81
- Track 42 : Hum25_60
- Track 43 : Pitbull_59
- Track 44 : Magritte_49
- Track 45 : Cantare_51
- Track 46 : Wollypog_81

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

The start number called the most often in the published annotations is 34, it was called in 30 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS_80, Aikyam_83, Anekin_85, Auxilium_82, BasketStar_84, BenchScraper_84, Bhageatrice_88, BillyTP_85, BlueShadow_82, Cantare_51, Cassini_81, CookieBear_83, CosmicBrownie_83, Crescenzo_88, DarwinJr_89, EvePickles_85, Faja_86, Globfish_83, Gorpy_82, GumGum_91, Hestia_78, Hillester_88, JellyBread_81, Kabloowy_85, Lasker_86, Lawnathon_87, LeBruni_85, MUWow_87, Mapleville_79, MaterMagnus_84, MidnightRain_90, MurphyJoseph_82, NewKitty_86, Nyilah_91, Phrank15_91, RadFad_89, Raphaella_84, Richie_87, Sakai_81, Satrap_83, Seahorse_91, SonDevVon_92, SpicyFrank_85, Sporco_86, Tiff81_79, Vopal_85, Windest_88,

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

- Magritte_49,

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

- AWGoat_60, BruhMoment_73, Hum25_60, Isolde_85, Pitbull_59, Wollypog_81, YoungHarleezy_85, Zucker_85,

Summary by start number:

Start 20:

- Found in 4 of 56 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 25.0% of time when present
- Phage (with cluster) where this start called: AWGoat_60 (AP4),

Start 21:

- Found in 1 of 56 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wollypog_81 (singleton),

Start 27:

- Found in 1 of 56 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 39

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Magritte_49 (singleton),

Start 30:

- Found in 1 of 56 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BruhMoment_73 (AP3),

Start 32:

- Found in 1 of 56 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zucker_85 (FN),

Start 33:

- Found in 2 of 56 (3.6%) of genes in pham
- Manual Annotations of this start: 2 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Isolde_85 (AY), YoungHarleezy_85 (AY),

Start 34:

- Found in 48 of 56 (85.7%) of genes in pham
- Manual Annotations of this start: 30 of 39
- Called 97.9% of time when present
- Phage (with cluster) where this start called: AdaS_80 (AY), Aikyam_83 (AY), Anekin_85 (AY), Auxilium_82 (AY), BasketStar_84 (AY), BenchScraper_84 (AY), Bhageatrice_88 (AY), BillyTP_85 (AY), BlueShadow_82 (AY), Cantare_51 (singleton), Cassini_81 (FN), CookieBear_83 (AY), CosmicBrownie_83 (AY), Crescenzo_88 (AY), DarwinJr_89 (AY), EvePickles_85 (AY), Faja_86 (AY), Globfish_83 (AY), Gorpy_82 (AY), GumGum_91 (AY), Hestia_78 (AY), Hillester_88 (AY), JellyBread_81 (AY), Kabloowy_85 (AY), Lasker_86 (AY), Lawnathon_87 (AY), LeBruni_85 (AY), MUWow_87 (AY), Mapleville_79 (AY), MaterMagnus_84 (AY), MidnightRain_90 (AY), MurphyJoseph_82 (AY), NewKitty_86 (AY), Nyilah_91 (AY), Phrank15_91 (AY), RadFad_89 (AY), Raphaella_84 (AY), Richie_87 (AY), Sakai_81 (AY), Satrap_83 (AY), Seahorse_91 (AY), SonDevVon_92 (AY), SpicyFrank_85 (AY), Sporco_86 (AY), Tiff81_79 (AY), Vopal_85 (AY), Windest_88 (AY),

Start 38:

- Found in 2 of 56 (3.6%) of genes in pham
- Manual Annotations of this start: 2 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hum25_60 (FQ), Pitbull_59 (FQ),

Summary by clusters:

There are 6 clusters represented in this pham: FQ, singleton, AP3, AP4, AY, FN,

Info for manual annotations of cluster AP3:

- Start number 30 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 20 was manually annotated 1 time for cluster AP4.

Info for manual annotations of cluster AY:

- Start number 33 was manually annotated 2 times for cluster AY.
- Start number 34 was manually annotated 29 times for cluster AY.

Info for manual annotations of cluster FN:

- Start number 32 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FQ:

- Start number 38 was manually annotated 2 times for cluster FQ.

Gene Information:

Gene: AWGoat_60 Start: 44171, Stop: 43587, Start Num: 20

Candidate Starts for AWGoat_60:

(2, 44426), (3, 44417), (7, 44318), (12, 44264), (14, 44219), (Start: 20 @44171 has 1 MA's), (23, 44129), (31, 44078), (45, 43961), (69, 43760), (80, 43682),

Gene: AdaS_80 Start: 44928, Stop: 45341, Start Num: 34

Candidate Starts for AdaS_80:

(17, 44811), (18, 44820), (Start: 34 @44928 has 30 MA's), (49, 45054), (72, 45204), (83, 45321),

Gene: Aikyam_83 Start: 45953, Stop: 46399, Start Num: 34

Candidate Starts for Aikyam_83:

(25, 45908), (Start: 34 @45953 has 30 MA's), (42, 46055), (76, 46286),

Gene: Anekin_85 Start: 48188, Stop: 48622, Start Num: 34

Candidate Starts for Anekin_85:

(15, 48032), (Start: 34 @48188 has 30 MA's), (47, 48305), (60, 48443), (76, 48509), (82, 48578),

Gene: Auxilium_82 Start: 45357, Stop: 45833, Start Num: 34

Candidate Starts for Auxilium_82:

(22, 45273), (Start: 34 @45357 has 30 MA's), (47, 45474), (61, 45618), (76, 45720),

Gene: BasketStar_84 Start: 47969, Stop: 48403, Start Num: 34

Candidate Starts for BasketStar_84:

(Start: 34 @47969 has 30 MA's), (47, 48086), (60, 48224), (76, 48290), (82, 48359),

Gene: BenchScraper_84 Start: 46314, Stop: 46808, Start Num: 34

Candidate Starts for BenchScraper_84:

(Start: 34 @46314 has 30 MA's), (51, 46491), (52, 46500), (72, 46671),

Gene: Bhageatrice_88 Start: 50590, Stop: 51084, Start Num: 34

Candidate Starts for Bhageatrice_88:

(Start: 34 @50590 has 30 MA's), (51, 50767), (52, 50776), (72, 50947),

Gene: BillyTP_85 Start: 48420, Stop: 48914, Start Num: 34

Candidate Starts for BillyTP_85:

(Start: 34 @48420 has 30 MA's), (51, 48597), (52, 48606), (72, 48777),

Gene: BlueShadow_82 Start: 47675, Stop: 48169, Start Num: 34
Candidate Starts for BlueShadow_82:
(Start: 34 @47675 has 30 MA's), (51, 47852), (52, 47861), (72, 48032),

Gene: BruhMoment_73 Start: 49223, Stop: 48708, Start Num: 30
Candidate Starts for BruhMoment_73:
(Start: 30 @49223 has 1 MA's), (48, 49073), (55, 48998), (57, 48950),

Gene: Cantare_51 Start: 46110, Stop: 46487, Start Num: 34
Candidate Starts for Cantare_51:
(Start: 34 @46110 has 30 MA's), (35, 46116), (36, 46119), (56, 46278), (65, 46380), (70, 46407), (74, 46437), (79, 46467),

Gene: Cassini_81 Start: 46935, Stop: 47390, Start Num: 34
Candidate Starts for Cassini_81:
(Start: 20 @46830 has 1 MA's), (Start: 34 @46935 has 30 MA's), (51, 47073), (62, 47175), (76, 47277),

Gene: CookieBear_83 Start: 46991, Stop: 47392, Start Num: 34
Candidate Starts for CookieBear_83:
(Start: 34 @46991 has 30 MA's), (76, 47279), (83, 47372),

Gene: CosmicBrownie_83 Start: 46516, Stop: 47010, Start Num: 34
Candidate Starts for CosmicBrownie_83:
(Start: 34 @46516 has 30 MA's), (51, 46693), (52, 46702), (72, 46873),

Gene: Crescenzo_88 Start: 49356, Stop: 49757, Start Num: 34
Candidate Starts for Crescenzo_88:
(10, 49128), (Start: 34 @49356 has 30 MA's),

Gene: DarwinJr_89 Start: 49470, Stop: 49871, Start Num: 34
Candidate Starts for DarwinJr_89:
(17, 49353), (18, 49362), (Start: 34 @49470 has 30 MA's),

Gene: EvePickles_85 Start: 48837, Stop: 49178, Start Num: 34
Candidate Starts for EvePickles_85:
(Start: 20 @48729 has 1 MA's), (Start: 34 @48837 has 30 MA's), (42, 48939), (46, 48957), (47, 48966), (51, 49014), (67, 49107), (72, 49143),

Gene: Faja_86 Start: 48359, Stop: 48745, Start Num: 34
Candidate Starts for Faja_86:
(6, 48092), (11, 48134), (Start: 34 @48359 has 30 MA's), (52, 48506), (54, 48518), (67, 48587), (76, 48632),

Gene: Globfish_83 Start: 46114, Stop: 46545, Start Num: 34
Candidate Starts for Globfish_83:
(1, 45718), (4, 45799), (10, 45883), (Start: 34 @46114 has 30 MA's), (72, 46408),

Gene: Gorpy_82 Start: 48333, Stop: 48809, Start Num: 34
Candidate Starts for Gorpy_82:
(Start: 34 @48333 has 30 MA's), (47, 48450), (59, 48591), (68, 48630), (72, 48672), (76, 48696), (83, 48789),

Gene: GumGum_91 Start: 48480, Stop: 48974, Start Num: 34

Candidate Starts for GumGum_91:

(Start: 34 @48480 has 30 MA's), (51, 48657), (52, 48666), (72, 48837),

Gene: Hestia_78 Start: 45289, Stop: 45783, Start Num: 34

Candidate Starts for Hestia_78:

(26, 45244), (Start: 34 @45289 has 30 MA's), (51, 45466), (52, 45475), (72, 45646),

Gene: Hillester_88 Start: 48096, Stop: 48530, Start Num: 34

Candidate Starts for Hillester_88:

(Start: 34 @48096 has 30 MA's), (47, 48213), (60, 48351), (76, 48417), (82, 48486),

Gene: Hum25_60 Start: 34774, Stop: 35166, Start Num: 38

Candidate Starts for Hum25_60:

(24, 34702), (Start: 38 @34774 has 2 MA's), (40, 34792), (42, 34855), (51, 34930), (75, 35050), (76, 35053), (77, 35062),

Gene: Isolde_85 Start: 48621, Stop: 49019, Start Num: 33

Candidate Starts for Isolde_85:

(13, 48438), (Start: 33 @48621 has 2 MA's), (52, 48768), (67, 48849), (76, 48906),

Gene: JellyBread_81 Start: 47381, Stop: 47875, Start Num: 34

Candidate Starts for JellyBread_81:

(Start: 34 @47381 has 30 MA's), (42, 47483), (46, 47501), (59, 47657), (68, 47696), (72, 47738), (76, 47762), (83, 47855),

Gene: Kabloowy_85 Start: 48367, Stop: 48768, Start Num: 34

Candidate Starts for Kabloowy_85:

(17, 48250), (18, 48259), (Start: 34 @48367 has 30 MA's),

Gene: Lasker_86 Start: 48414, Stop: 48908, Start Num: 34

Candidate Starts for Lasker_86:

(9, 48180), (Start: 34 @48414 has 30 MA's), (51, 48591), (52, 48600), (72, 48771),

Gene: Lawnathon_87 Start: 47552, Stop: 47980, Start Num: 34

Candidate Starts for Lawnathon_87:

(Start: 34 @47552 has 30 MA's), (47, 47669), (72, 47843), (76, 47867),

Gene: LeBruni_85 Start: 47711, Stop: 48136, Start Num: 34

Candidate Starts for LeBruni_85:

(Start: 34 @47711 has 30 MA's), (51, 47888), (52, 47897), (71, 47978), (72, 47999),

Gene: MUWow_87 Start: 49154, Stop: 49555, Start Num: 34

Candidate Starts for MUWow_87:

(Start: 34 @49154 has 30 MA's), (54, 49316), (76, 49442), (83, 49535),

Gene: Magritte_49 Start: 48175, Stop: 48675, Start Num: 27

Candidate Starts for Magritte_49:

(Start: 27 @48175 has 1 MA's), (Start: 34 @48214 has 30 MA's), (36, 48229), (41, 48301), (51, 48409), (64, 48493), (78, 48571),

Gene: Mapleville_79 Start: 46363, Stop: 46764, Start Num: 34

Candidate Starts for Mapleville_79:

(8, 46129), (Start: 34 @46363 has 30 MA's), (83, 46744),

Gene: MaterMagnus_84 Start: 48125, Stop: 48532, Start Num: 34
Candidate Starts for MaterMagnus_84:
(25, 48080), (Start: 34 @48125 has 30 MA's), (76, 48419), (83, 48512),

Gene: MidnightRain_90 Start: 48881, Stop: 49366, Start Num: 34
Candidate Starts for MidnightRain_90:
(Start: 34 @48881 has 30 MA's), (51, 49058), (52, 49067), (72, 49229),

Gene: MurphyJoseph_82 Start: 46404, Stop: 46835, Start Num: 34
Candidate Starts for MurphyJoseph_82:
(Start: 34 @46404 has 30 MA's), (51, 46560), (72, 46698), (76, 46722), (83, 46815),

Gene: NewKitty_86 Start: 48783, Stop: 49196, Start Num: 34
Candidate Starts for NewKitty_86:
(17, 48666), (18, 48675), (Start: 34 @48783 has 30 MA's), (49, 48909), (72, 49059),

Gene: Nyilah_91 Start: 47700, Stop: 48131, Start Num: 34
Candidate Starts for Nyilah_91:
(Start: 34 @47700 has 30 MA's), (44, 47811), (51, 47877), (52, 47886), (66, 47955), (72, 47994),

Gene: Phrank15_91 Start: 48788, Stop: 49189, Start Num: 34
Candidate Starts for Phrank15_91:
(Start: 34 @48788 has 30 MA's), (76, 49076), (83, 49169),

Gene: Pitbull_59 Start: 33633, Stop: 34013, Start Num: 38
Candidate Starts for Pitbull_59:
(37, 33630), (Start: 38 @33633 has 2 MA's), (40, 33651), (43, 33717), (51, 33777), (52, 33786), (75, 33897), (76, 33900),

Gene: RadFad_89 Start: 48096, Stop: 48530, Start Num: 34
Candidate Starts for RadFad_89:
(Start: 34 @48096 has 30 MA's), (47, 48213), (60, 48351), (76, 48417), (82, 48486),

Gene: Raphaella_84 Start: 46653, Stop: 47147, Start Num: 34
Candidate Starts for Raphaella_84:
(6, 46386), (11, 46428), (Start: 34 @46653 has 30 MA's), (51, 46830), (52, 46839), (72, 47010),

Gene: Richie_87 Start: 48886, Stop: 49380, Start Num: 34
Candidate Starts for Richie_87:
(Start: 34 @48886 has 30 MA's), (51, 49063), (52, 49072), (72, 49243),

Gene: Sakai_81 Start: 47044, Stop: 47520, Start Num: 34
Candidate Starts for Sakai_81:
(Start: 34 @47044 has 30 MA's), (47, 47161), (59, 47302), (68, 47341), (72, 47383), (76, 47407), (83, 47500),

Gene: Satrap_83 Start: 47191, Stop: 47619, Start Num: 34
Candidate Starts for Satrap_83:
(Start: 34 @47191 has 30 MA's), (47, 47308), (72, 47482), (83, 47599),

Gene: Seahorse_91 Start: 52291, Stop: 52725, Start Num: 34
Candidate Starts for Seahorse_91:

(10, 52063), (Start: 34 @52291 has 30 MA's), (72, 52588), (76, 52612),

Gene: SonDevVon_92 Start: 47989, Stop: 48390, Start Num: 34

Candidate Starts for SonDevVon_92:

(Start: 34 @47989 has 30 MA's), (76, 48277), (83, 48370),

Gene: SpicyFrank_85 Start: 47210, Stop: 47635, Start Num: 34

Candidate Starts for SpicyFrank_85:

(Start: 34 @47210 has 30 MA's), (52, 47375), (72, 47498),

Gene: Sporco_86 Start: 48755, Stop: 49153, Start Num: 34

Candidate Starts for Sporco_86:

(Start: 20 @48647 has 1 MA's), (Start: 34 @48755 has 30 MA's), (76, 49040), (83, 49133),

Gene: Tiff81_79 Start: 45794, Stop: 46192, Start Num: 34

Candidate Starts for Tiff81_79:

(6, 45527), (11, 45569), (Start: 34 @45794 has 30 MA's), (72, 46055), (76, 46079),

Gene: Vopal_85 Start: 48719, Stop: 49213, Start Num: 34

Candidate Starts for Vopal_85:

(6, 48452), (11, 48494), (Start: 34 @48719 has 30 MA's), (51, 48896), (52, 48905), (72, 49076),

Gene: Windest_88 Start: 46371, Stop: 46865, Start Num: 34

Candidate Starts for Windest_88:

(Start: 34 @46371 has 30 MA's), (51, 46548), (52, 46557), (72, 46728),

Gene: Wollypog_81 Start: 56236, Stop: 56814, Start Num: 21

Candidate Starts for Wollypog_81:

(16, 56194), (19, 56209), (Start: 21 @56236 has 1 MA's), (28, 56284), (29, 56296), (39, 56350), (50, 56476), (52, 56488), (58, 56560), (63, 56605), (73, 56668), (74, 56674), (81, 56752), (83, 56791),

Gene: YoungHarleezy_85 Start: 48259, Stop: 48660, Start Num: 33

Candidate Starts for YoungHarleezy_85:

(Start: 33 @48259 has 2 MA's), (76, 48547),

Gene: Zucker_85 Start: 49487, Stop: 49963, Start Num: 32

Candidate Starts for Zucker_85:

(5, 49187), (Start: 32 @49487 has 1 MA's), (53, 49670), (55, 49679), (80, 49874),