

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 308667 Report

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

Pham number 308667 has 58 members, 17 are drafts.

Phages represented in each track:

- Track 1 : Kabloowy_61, MaterMagnus_62, Raphaella_60, Aikyam_60, MUWow_61
- Track 2 : Phrank15_62, Satrap_61
- Track 3 : Lawnathon_62
- Track 4 : SpicyFrank_64
- Track 5 : Faja_61
- Track 6 : BenchScraper_60
- Track 7 : CookieBear_61, AdaS_57, BlueShadow_61, Isolde_60, BillyTP_63
- Track 8 : Anekin_63
- Track 9 : MurphyJoseph_57
- Track 10 : Hillester_65, RadFad_65
- Track 11 : Hestia_53
- Track 12 : Gorpy_61, Sakai_60
- Track 13 : EvePickles_56
- Track 14 : MidnightRain_65, Mapleville_57
- Track 15 : Shukran_56
- Track 16 : YoungHarleezy_61
- Track 17 : AbbyDaisy_60
- Track 18 : DarwinJr_63, Crescenzo_61
- Track 19 : Nyilah_60
- Track 20 : Globfish_61
- Track 21 : BasketStar_63
- Track 22 : Bhageatrice_62
- Track 23 : ThayneTheZag_61
- Track 24 : Seahorse_63
- Track 25 : GumGum_63
- Track 26 : Tiff81_55
- Track 27 : JellyBread_58
- Track 28 : Auxilium_57
- Track 29 : LeBruni_62
- Track 30 : Sporco_65
- Track 31 : CosmicBrownie_55
- Track 32 : Lasker_60
- Track 33 : Persistence_57, JakeTheSnake_67
- Track 34 : Cassini_55
- Track 35 : BellaJr_52
- Track 36 : BlackSpider_49
- Track 37 : Hum25_69

- Track 38 : Skitty_60
- Track 39 : MrSmee_65
- Track 40 : Pitbull_67
- Track 41 : Merpity_67
- Track 42 : Skyerus_59, Raya_64
- Track 43 : Khuang_39

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

The start number called the most often in the published annotations is 29, it was called in 34 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbyDaisy_60, AdaS_57, Aikyam_60, Auxilium_57, BasketStar_63, BellaJr_52, BenchScraper_60, Bhageatrice_62, BillyTP_63, BlueShadow_61, Cassini_55, CookieBear_61, CosmicBrownie_55, Crescenzo_61, DarwinJr_63, EvePickles_56, Faja_61, Globfish_61, Gorpy_61, GumGum_63, Hestia_53, Hillester_65, Isolde_60, JakeTheSnake_67, JellyBread_58, Kabloowy_61, Lasker_60, Lawnathon_62, MUWow_61, Mapleville_57, MaterMagnus_62, MidnightRain_65, MurphyJoseph_57, Nyilah_60, Persistence_57, Phrank15_62, RadFad_65, Raphaella_60, Sakai_60, Satrap_61, Seahorse_63, Shukran_56, SpicyFrank_64, Sporco_65, ThayneTheZag_61, Tiff81_55, YoungHarleezy_61,

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:

- Anekin_63, BlackSpider_49, Hum25_69, Khuang_39, LeBruni_62, Merpity_67, MrSmee_65, Pitbull_67, Raya_64, Skitty_60, Skyerus_59,

Summary by start number:

Start 25:

- Found in 4 of 58 (6.9%) of genes in pham
- Manual Annotations of this start: 2 of 41
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Anekin_63 (AY), Khuang_39 (FS), LeBruni_62 (AY),

Start 26:

- Found in 4 of 58 (6.9%) of genes in pham
- Manual Annotations of this start: 2 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hum25_69 (FQ1), Pitbull_67 (FQ1), Raya_64 (FQ2), Skyerus_59 (FQ2),

Start 27:

- Found in 3 of 58 (5.2%) of genes in pham
- Manual Annotations of this start: 2 of 41
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Merpity_67 (FQ1), MrSmee_65 (FQ1), Skitty_60 (FQ1),

Start 28:

- Found in 1 of 58 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlackSpider_49 (FN),

Start 29:

- Found in 47 of 58 (81.0%) of genes in pham
- Manual Annotations of this start: 34 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_60 (AY), AdaS_57 (AY), Aikyam_60 (AY), Auxilium_57 (AY), BasketStar_63 (AY), BellaJr_52 (FN), BenchScraper_60 (AY), Bhageatrice_62 (AY), BillyTP_63 (AY), BlueShadow_61 (AY), Cassini_55 (FN), CookieBear_61 (AY), CosmicBrownie_55 (AY), Crescenzo_61 (AY), DarwinJr_63 (AY), EvePickles_56 (AY), Faja_61 (AY), Globfish_61 (AY), Gorpy_61 (AY), GumGum_63 (AY), Hestia_53 (AY), Hillester_65 (AY), Isolde_60 (AY), JakeTheSnake_67 (AY), JellyBread_58 (AY), Kabloowy_61 (AY), Lasker_60 (AY), Lawnathon_62 (AY), MUWow_61 (AY), Mapleville_57 (AY), MaterMagnus_62 (AY), MidnightRain_65 (AY), MurphyJoseph_57 (AY), Nyilah_60 (AY), Persistence_57 (AY), Phrank15_62 (AY), RadFad_65 (AY), Raphaella_60 (AY), Sakai_60 (AY), Satrap_61 (AY), Seahorse_63 (AY), Shukran_56 (AY), SpicyFrank_64 (AY), Sporco_65 (AY), ThayneTheZag_61 (AY), Tiff81_55 (AY), YoungHarleezy_61 (AY),

Summary by clusters:

There are 5 clusters represented in this pham: AY, FQ2, FQ1, FN, FS,

Info for manual annotations of cluster AY:

- Start number 25 was manually annotated 2 times for cluster AY.
- Start number 29 was manually annotated 34 times for cluster AY.

Info for manual annotations of cluster FN:

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

Info for manual annotations of cluster FQ1:

- Start number 26 was manually annotated 2 times for cluster FQ1.
- Start number 27 was manually annotated 2 times for cluster FQ1.

Gene Information:

Gene: AbbyDaisy_60 Start: 34539, Stop: 34664, Start Num: 29

Candidate Starts for AbbyDaisy_60:

(20, 34428), (23, 34491), (Start: 29 @34539 has 34 MA's), (33, 34566), (34, 34569), (39, 34617),

Gene: AdaS_57 Start: 32356, Stop: 32481, Start Num: 29

Candidate Starts for AdaS_57:

(16, 32188), (18, 32209), (21, 32257), (Start: 29 @32356 has 34 MA's), (33, 32383), (34, 32386), (38, 32425), (39, 32434), (42, 32455),

Gene: Aikyam_60 Start: 32675, Stop: 32800, Start Num: 29

Candidate Starts for Aikyam_60:

(16, 32507), (18, 32528), (21, 32576), (Start: 29 @32675 has 34 MA's), (33, 32702), (34, 32705), (38, 32744), (39, 32753), (42, 32774),

Gene: Anekin_63 Start: 34902, Stop: 35039, Start Num: 25

Candidate Starts for Anekin_63:

(Start: 25 @34902 has 2 MA's), (35, 34950), (38, 34980),

Gene: Auxilium_57 Start: 31829, Stop: 31954, Start Num: 29

Candidate Starts for Auxilium_57:

(16, 31661), (18, 31682), (21, 31730), (Start: 29 @31829 has 34 MA's), (33, 31856), (34, 31859), (38, 31898), (39, 31907), (42, 31928),

Gene: BasketStar_63 Start: 35026, Stop: 35151, Start Num: 29

Candidate Starts for BasketStar_63:

(16, 34858), (18, 34879), (21, 34927), (Start: 29 @35026 has 34 MA's), (32, 35050), (33, 35053), (34, 35056), (38, 35095), (39, 35104), (42, 35125),

Gene: BellaJr_52 Start: 32497, Stop: 32616, Start Num: 29

Candidate Starts for BellaJr_52:

(19, 32374), (Start: 29 @32497 has 34 MA's), (33, 32524), (35, 32536), (39, 32575),

Gene: BenchScraper_60 Start: 33867, Stop: 33992, Start Num: 29

Candidate Starts for BenchScraper_60:

(1, 33231), (2, 33273), (3, 33339), (5, 33513), (6, 33522), (7, 33573), (18, 33720), (21, 33768), (Start: 29 @33867 has 34 MA's), (33, 33894), (34, 33897), (38, 33936), (39, 33945), (42, 33966),

Gene: Bhageatrice_62 Start: 36379, Stop: 36504, Start Num: 29

Candidate Starts for Bhageatrice_62:

(18, 36232), (21, 36280), (Start: 29 @36379 has 34 MA's), (33, 36406), (34, 36409), (39, 36457), (42, 36478),

Gene: BillyTP_63 Start: 35722, Stop: 35847, Start Num: 29

Candidate Starts for BillyTP_63:

(16, 35554), (18, 35575), (21, 35623), (Start: 29 @35722 has 34 MA's), (33, 35749), (34, 35752), (38, 35791), (39, 35800), (42, 35821),

Gene: BlackSpider_49 Start: 31161, Stop: 31292, Start Num: 28

Candidate Starts for BlackSpider_49:

(12, 30954), (13, 30957), (Start: 28 @31161 has 1 MA's),

Gene: BlueShadow_61 Start: 34512, Stop: 34637, Start Num: 29

Candidate Starts for BlueShadow_61:

(16, 34344), (18, 34365), (21, 34413), (Start: 29 @34512 has 34 MA's), (33, 34539), (34, 34542), (38, 34581), (39, 34590), (42, 34611),

Gene: Cassini_55 Start: 33068, Stop: 33193, Start Num: 29

Candidate Starts for Cassini_55:

(9, 32819), (14, 32879), (Start: 29 @33068 has 34 MA's), (33, 33095),

Gene: CookieBear_61 Start: 34106, Stop: 34231, Start Num: 29

Candidate Starts for CookieBear_61:

(16, 33938), (18, 33959), (21, 34007), (Start: 29 @34106 has 34 MA's), (33, 34133), (34, 34136), (38, 34175), (39, 34184), (42, 34205),

Gene: CosmicBrownie_55 Start: 32517, Stop: 32642, Start Num: 29

Candidate Starts for CosmicBrownie_55:

(15, 32337), (18, 32370), (Start: 29 @32517 has 34 MA's), (30, 32526), (33, 32544), (34, 32547), (38, 32586), (39, 32595), (42, 32616),

Gene: Crescenzo_61 Start: 35258, Stop: 35383, Start Num: 29

Candidate Starts for Crescenzo_61:

(Start: 29 @35258 has 34 MA's), (33, 35285), (34, 35288), (38, 35327), (39, 35336), (42, 35357),

Gene: DarwinJr_63 Start: 35213, Stop: 35338, Start Num: 29

Candidate Starts for DarwinJr_63:

(Start: 29 @35213 has 34 MA's), (33, 35240), (34, 35243), (38, 35282), (39, 35291), (42, 35312),

Gene: EvePickles_56 Start: 34096, Stop: 34221, Start Num: 29

Candidate Starts for EvePickles_56:

(Start: 29 @34096 has 34 MA's), (33, 34123), (34, 34126), (38, 34165), (39, 34174),

Gene: Faja_61 Start: 35481, Stop: 35606, Start Num: 29

Candidate Starts for Faja_61:

(15, 35301), (18, 35334), (21, 35382), (Start: 29 @35481 has 34 MA's), (32, 35505), (33, 35508), (34, 35511), (38, 35550), (39, 35559), (42, 35580),

Gene: Globfish_61 Start: 34535, Stop: 34660, Start Num: 29

Candidate Starts for Globfish_61:

(Start: 29 @34535 has 34 MA's), (33, 34562), (38, 34604), (39, 34613),

Gene: Gorpy_61 Start: 35098, Stop: 35223, Start Num: 29

Candidate Starts for Gorpy_61:

(15, 34918), (18, 34951), (21, 34999), (Start: 29 @35098 has 34 MA's), (33, 35125), (34, 35128), (38, 35167), (39, 35176), (42, 35197),

Gene: GumGum_63 Start: 34083, Stop: 34205, Start Num: 29

Candidate Starts for GumGum_63:

(Start: 29 @34083 has 34 MA's), (33, 34110), (35, 34122), (38, 34152), (39, 34161),

Gene: Hestia_53 Start: 31665, Stop: 31790, Start Num: 29

Candidate Starts for Hestia_53:

(4, 31302), (16, 31497), (18, 31518), (21, 31566), (Start: 29 @31665 has 34 MA's), (32, 31689), (33, 31692), (34, 31695), (38, 31734), (39, 31743), (42, 31764),

Gene: Hillester_65 Start: 35445, Stop: 35570, Start Num: 29

Candidate Starts for Hillester_65:

(15, 35265), (18, 35298), (21, 35346), (Start: 29 @35445 has 34 MA's), (33, 35472), (34, 35475), (38, 35514), (39, 35523), (42, 35544),

Gene: Hum25_69 Start: 37651, Stop: 37791, Start Num: 26

Candidate Starts for Hum25_69:
(Start: 26 @37651 has 2 MA's), (43, 37774), (44, 37780),

Gene: Isolde_60 Start: 33775, Stop: 33900, Start Num: 29
Candidate Starts for Isolde_60:
(16, 33607), (18, 33628), (21, 33676), (Start: 29 @33775 has 34 MA's), (33, 33802), (34, 33805), (38, 33844), (39, 33853), (42, 33874),

Gene: JakeTheSnake_67 Start: 36519, Stop: 36638, Start Num: 29
Candidate Starts for JakeTheSnake_67:
(8, 36249), (Start: 29 @36519 has 34 MA's), (33, 36546), (35, 36558), (39, 36597),

Gene: JellyBread_58 Start: 33127, Stop: 33252, Start Num: 29
Candidate Starts for JellyBread_58:
(15, 32947), (18, 32980), (21, 33028), (Start: 29 @33127 has 34 MA's), (33, 33154), (34, 33157), (38, 33196), (39, 33205), (42, 33226),

Gene: Kabloowy_61 Start: 35047, Stop: 35172, Start Num: 29
Candidate Starts for Kabloowy_61:
(16, 34879), (18, 34900), (21, 34948), (Start: 29 @35047 has 34 MA's), (33, 35074), (34, 35077), (38, 35116), (39, 35125), (42, 35146),

Gene: Khuang_39 Start: 25888, Stop: 25757, Start Num: 25
Candidate Starts for Khuang_39:
(22, 25951), (24, 25906), (Start: 25 @25888 has 2 MA's), (38, 25810),

Gene: Lasker_60 Start: 34607, Stop: 34732, Start Num: 29
Candidate Starts for Lasker_60:
(10, 34364), (14, 34418), (15, 34430), (Start: 29 @34607 has 34 MA's), (33, 34634), (34, 34637), (38, 34676), (39, 34685),

Gene: Lawnathon_62 Start: 34267, Stop: 34392, Start Num: 29
Candidate Starts for Lawnathon_62:
(16, 34099), (18, 34120), (21, 34168), (Start: 29 @34267 has 34 MA's), (33, 34294), (34, 34297), (38, 34336), (39, 34345),

Gene: LeBruni_62 Start: 33844, Stop: 33981, Start Num: 25
Candidate Starts for LeBruni_62:
(Start: 25 @33844 has 2 MA's), (35, 33892), (38, 33922),

Gene: MUWow_61 Start: 34442, Stop: 34567, Start Num: 29
Candidate Starts for MUWow_61:
(16, 34274), (18, 34295), (21, 34343), (Start: 29 @34442 has 34 MA's), (33, 34469), (34, 34472), (38, 34511), (39, 34520), (42, 34541),

Gene: Mapleville_57 Start: 33586, Stop: 33711, Start Num: 29
Candidate Starts for Mapleville_57:
(Start: 29 @33586 has 34 MA's), (33, 33613), (34, 33616), (38, 33655), (39, 33664), (42, 33685),

Gene: MaterMagnus_62 Start: 34847, Stop: 34972, Start Num: 29
Candidate Starts for MaterMagnus_62:
(16, 34679), (18, 34700), (21, 34748), (Start: 29 @34847 has 34 MA's), (33, 34874), (34, 34877), (38, 34916), (39, 34925), (42, 34946),

Gene: Merpity_67 Start: 37204, Stop: 37347, Start Num: 27

Candidate Starts for Merpity_67:

(Start: 27 @37204 has 2 MA's), (30, 37219), (31, 37231), (36, 37261), (37, 37276), (38, 37279), (41, 37300), (43, 37327), (45, 37336),

Gene: MidnightRain_65 Start: 35616, Stop: 35741, Start Num: 29

Candidate Starts for MidnightRain_65:

(Start: 29 @35616 has 34 MA's), (33, 35643), (34, 35646), (38, 35685), (39, 35694), (42, 35715),

Gene: MrSmee_65 Start: 37015, Stop: 37155, Start Num: 27

Candidate Starts for MrSmee_65:

(Start: 27 @37015 has 2 MA's), (43, 37138),

Gene: MurphyJoseph_57 Start: 33043, Stop: 33168, Start Num: 29

Candidate Starts for MurphyJoseph_57:

(Start: 29 @33043 has 34 MA's), (30, 33052), (33, 33070), (34, 33073), (38, 33112), (39, 33121), (42, 33142),

Gene: Nyilah_60 Start: 32673, Stop: 32798, Start Num: 29

Candidate Starts for Nyilah_60:

(18, 32526), (Start: 29 @32673 has 34 MA's), (30, 32682), (33, 32700), (34, 32703), (38, 32742), (39, 32751), (42, 32772),

Gene: Persistence_57 Start: 33216, Stop: 33335, Start Num: 29

Candidate Starts for Persistence_57:

(8, 32946), (Start: 29 @33216 has 34 MA's), (33, 33243), (35, 33255), (39, 33294),

Gene: Phrank15_62 Start: 34398, Stop: 34523, Start Num: 29

Candidate Starts for Phrank15_62:

(Start: 29 @34398 has 34 MA's), (33, 34425), (34, 34428), (38, 34467), (39, 34476), (42, 34497),

Gene: Pitbull_67 Start: 37117, Stop: 37260, Start Num: 26

Candidate Starts for Pitbull_67:

(Start: 25 @37114 has 2 MA's), (Start: 26 @37117 has 2 MA's), (31, 37144), (36, 37174), (37, 37189), (38, 37192), (40, 37207), (41, 37213), (43, 37240), (44, 37246),

Gene: RadFad_65 Start: 35445, Stop: 35570, Start Num: 29

Candidate Starts for RadFad_65:

(15, 35265), (18, 35298), (21, 35346), (Start: 29 @35445 has 34 MA's), (33, 35472), (34, 35475), (38, 35514), (39, 35523), (42, 35544),

Gene: Raphaella_60 Start: 33965, Stop: 34090, Start Num: 29

Candidate Starts for Raphaella_60:

(16, 33797), (18, 33818), (21, 33866), (Start: 29 @33965 has 34 MA's), (33, 33992), (34, 33995), (38, 34034), (39, 34043), (42, 34064),

Gene: Raya_64 Start: 36143, Stop: 36283, Start Num: 26

Candidate Starts for Raya_64:

(Start: 26 @36143 has 2 MA's), (43, 36266), (44, 36272),

Gene: Sakai_60 Start: 33809, Stop: 33934, Start Num: 29

Candidate Starts for Sakai_60:

(15, 33629), (18, 33662), (21, 33710), (Start: 29 @33809 has 34 MA's), (33, 33836), (34, 33839), (38, 33878), (39, 33887), (42, 33908),

Gene: Satrap_61 Start: 34245, Stop: 34370, Start Num: 29

Candidate Starts for Satrap_61:

(Start: 29 @34245 has 34 MA's), (33, 34272), (34, 34275), (38, 34314), (39, 34323), (42, 34344),

Gene: Seahorse_63 Start: 35952, Stop: 36077, Start Num: 29

Candidate Starts for Seahorse_63:

(23, 35904), (Start: 29 @35952 has 34 MA's), (33, 35979), (34, 35982), (39, 36030),

Gene: Shukran_56 Start: 32442, Stop: 32567, Start Num: 29

Candidate Starts for Shukran_56:

(15, 32262), (20, 32331), (Start: 29 @32442 has 34 MA's), (33, 32469), (38, 32511),

Gene: Skitty_60 Start: 35254, Stop: 35397, Start Num: 27

Candidate Starts for Skitty_60:

(Start: 27 @35254 has 2 MA's), (42, 35359), (43, 35377),

Gene: Skyerus_59 Start: 34261, Stop: 34401, Start Num: 26

Candidate Starts for Skyerus_59:

(Start: 26 @34261 has 2 MA's), (43, 34384), (44, 34390),

Gene: SpicyFrank_64 Start: 35216, Stop: 35338, Start Num: 29

Candidate Starts for SpicyFrank_64:

(Start: 29 @35216 has 34 MA's), (33, 35243), (38, 35285), (39, 35294), (42, 35315),

Gene: Sporco_65 Start: 35393, Stop: 35518, Start Num: 29

Candidate Starts for Sporco_65:

(11, 35171), (18, 35246), (21, 35294), (Start: 29 @35393 has 34 MA's), (33, 35420), (34, 35423), (38, 35462), (39, 35471), (42, 35492),

Gene: ThayneTheZag_61 Start: 33668, Stop: 33790, Start Num: 29

Candidate Starts for ThayneTheZag_61:

(Start: 29 @33668 has 34 MA's), (33, 33695), (34, 33698), (38, 33737), (39, 33746), (42, 33767),

Gene: Tiff81_55 Start: 32012, Stop: 32137, Start Num: 29

Candidate Starts for Tiff81_55:

(17, 31856), (21, 31913), (Start: 29 @32012 has 34 MA's), (33, 32039), (34, 32042), (38, 32081), (39, 32090), (42, 32111),

Gene: YoungHarleezy_61 Start: 34504, Stop: 34629, Start Num: 29

Candidate Starts for YoungHarleezy_61:

(Start: 29 @34504 has 34 MA's), (34, 34534), (38, 34573), (39, 34582), (42, 34603),