



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 325196 Report

This analysis was run 09/05/26 on database version 662.

Pham number 325196 has 64 members, 14 are drafts.

Phages represented in each track:

- Track 1 : ThayneTheZag_58
- Track 2 : Faja_58
- Track 3 : AdaS_53
- Track 4 : SpicyFrank_61
- Track 5 : GumGum_56
- Track 6 : Windest_59
- Track 7 : Anekin_55, BenchScraper_56, Vopal_60
- Track 8 : Sporco_60
- Track 9 : MurphyJoseph_54
- Track 10 : Hillester_61, RadFad_61, Tiff81_53
- Track 11 : MaterMagnus_58, Aikyam_56, Auxilium_53
- Track 12 : Mapleville_53, MidnightRain_61, Lasker_56
- Track 13 : EvePickles_53
- Track 14 : Raphaella_56
- Track 15 : DarwinJr_60, Crescenzo_58
- Track 16 : BillyTP_59, BasketStar_59, CookieBear_57, Isolde_56
- Track 17 : LeBruni_56
- Track 18 : MUWow_57, Bhageatrice_58
- Track 19 : Sakai_56, BlueShadow_57, Gorpy_57, Nyilah_56
- Track 20 : Kabloowy_57
- Track 21 : Richie_59
- Track 22 : Phrank15_58, Lawnathon_58
- Track 23 : Seahorse_60
- Track 24 : JellyBread_54, YoungHarleezy_57
- Track 25 : Satrap_58
- Track 26 : NewKitty_59
- Track 27 : AbbyDaisy_56
- Track 28 : SonDevVon_61
- Track 29 : Raqqa_50
- Track 30 : CosmicBrownie_52
- Track 31 : Hestia_50
- Track 32 : Ding_48
- Track 33 : Globfish_57
- Track 34 : BrayBeast_40
- Track 35 : JeanClaude_43
- Track 36 : Sarge_38
- Track 37 : Alatato_37

- Track 38 : Rooter_40
- Track 39 : Shoya_44
- Track 40 : Pigu_38
- Track 41 : Cassini_52
- Track 42 : Zucker_49
- Track 43 : BlackSpider_44
- Track 44 : BellaJr_47
- Track 45 : ArV2_40
- Track 46 : DillyDally_39

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

The start number called the most often in the published annotations is 10, it was called in 36 of the 50 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS_53, Aikyam_56, Anekin_55, Auxilium_53, BasketStar_59, BenchScraper_56, Bhageatrice_58, BillyTP_59, BlueShadow_57, Cassini_52, CookieBear_57, Crescenzo_58, DarwinJr_60, EvePickles_53, Faja_58, Globfish_57, Gorpy_57, GumGum_56, Hillester_61, Isolde_56, JellyBread_54, Kabloowy_57, Lasker_56, Lawnathon_58, LeBruni_56, MUWow_57, Mapleville_53, MaterMagnus_58, MidnightRain_61, NewKitty_59, Nyilah_56, Phrank15_58, RadFad_61, Raphaella_56, Raqqa_50, Richie_59, Sakai_56, Satrap_58, SpicyFrank_61, Sporco_60, ThayneTheZag_58, Tiff81_53, Vopal_60, Windest_59, YoungHarleezy_57,

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

- CosmicBrownie_52, MurphyJoseph_54, SonDevVon_61,

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

- AbbyDaisy_56, Alatato_37, ArV2_40, BellaJr_47, BlackSpider_44, BrayBeast_40, DillyDally_39, Ding_48, Hestia_50, JeanClaude_43, Pigu_38, Rooter_40, Sarge_38, Seahorse_60, Shoya_44, Zucker_49,

Summary by start number:

Start 5:

- Found in 56 of 64 (87.5%) of genes in pham
- Manual Annotations of this start: 1 of 50
- Called 5.4% of time when present
- Phage (with cluster) where this start called: CosmicBrownie_52 (AY), MurphyJoseph_54 (AY), SonDevVon_61 (AY),

Start 9:

- Found in 15 of 64 (23.4%) of genes in pham
- Manual Annotations of this start: 12 of 50
- Called 93.3% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_56 (AY), Alatato_37 (FB), ArV2_40 (singleton), BlackSpider_44 (FN), BrayBeast_40 (FB), Ding_48 (AY), Hestia_50 (AY), JeanClaude_43 (FB), Pigu_38 (FB), Rooter_40 (FB), Sarge_38 (FB), Seahorse_60 (AY), Shoya_44 (FB), Zucker_49 (FN),

Start 10:

- Found in 48 of 64 (75.0%) of genes in pham
- Manual Annotations of this start: 36 of 50
- Called 93.8% of time when present
- Phage (with cluster) where this start called: AdaS_53 (AY), Aikyam_56 (AY), Anekin_55 (AY), Auxilium_53 (AY), BasketStar_59 (AY), BenchScraper_56 (AY), Bhageatrice_58 (AY), BillyTP_59 (AY), BlueShadow_57 (AY), Cassini_52 (FN), CookieBear_57 (AY), Crescenzo_58 (AY), DarwinJr_60 (AY), EvePickles_53 (AY), Faja_58 (AY), Globfish_57 (AY), Gorpy_57 (AY), GumGum_56 (AY), Hillester_61 (AY), Isolde_56 (AY), JellyBread_54 (AY), Kabloowy_57 (AY), Lasker_56 (AY), Lawnathon_58 (AY), LeBruni_56 (AY), MUWow_57 (AY), Mapleville_53 (AY), MaterMagnus_58 (AY), MidnightRain_61 (AY), NewKitty_59 (AY), Nyilah_56 (AY), Phrank15_58 (AY), RadFad_61 (AY), Raphaella_56 (AY), Raqqa_50 (AY), Richie_59 (AY), Sakai_56 (AY), Satrap_58 (AY), SpicyFrank_61 (AY), Sporco_60 (AY), ThayneTheZag_58 (AY), Tiff81_53 (AY), Vopal_60 (AY), Windest_59 (AY), YoungHarleezy_57 (AY),

Start 12:

- Found in 1 of 64 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 50
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DillyDally_39 (singleton),

Start 14:

- Found in 2 of 64 (3.1%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BellaJr_47 (FN),

Summary by clusters:

There are 4 clusters represented in this pham: AY, FB, singleton, FN,

Info for manual annotations of cluster AY:

- Start number 5 was manually annotated 1 time for cluster AY.
- Start number 9 was manually annotated 4 times for cluster AY.
- Start number 10 was manually annotated 36 times for cluster AY.

Info for manual annotations of cluster FB:

- Start number 9 was manually annotated 6 times for cluster FB.

Info for manual annotations of cluster FN:

- Start number 9 was manually annotated 2 times for cluster FN.

Gene Information:

Gene: AbbyDaisy_56 Start: 33760, Stop: 33918, Start Num: 9

Candidate Starts for AbbyDaisy_56:

(Start: 9 @33760 has 12 MA's), (25, 33826), (29, 33844), (34, 33898),

Gene: AdaS_53 Start: 31700, Stop: 31858, Start Num: 10

Candidate Starts for AdaS_53:

(Start: 5 @31667 has 1 MA's), (Start: 10 @31700 has 36 MA's), (33, 31814), (34, 31838),

Gene: Aikyam_56 Start: 31872, Stop: 32030, Start Num: 10

Candidate Starts for Aikyam_56:

(Start: 5 @31839 has 1 MA's), (Start: 10 @31872 has 36 MA's), (23, 31926), (33, 31986),

Gene: Alatato_37 Start: 26513, Stop: 26671, Start Num: 9

Candidate Starts for Alatato_37:

(Start: 5 @26483 has 1 MA's), (Start: 9 @26513 has 12 MA's), (29, 26597),

Gene: Anekin_55 Start: 33544, Stop: 33702, Start Num: 10

Candidate Starts for Anekin_55:

(Start: 5 @33511 has 1 MA's), (Start: 10 @33544 has 36 MA's), (33, 33658),

Gene: ArV2_40 Start: 25889, Stop: 26032, Start Num: 9

Candidate Starts for ArV2_40:

(Start: 9 @25889 has 12 MA's), (22, 25925), (25, 25937), (30, 25961), (33, 25988),

Gene: Auxilium_53 Start: 31029, Stop: 31187, Start Num: 10

Candidate Starts for Auxilium_53:

(Start: 5 @30996 has 1 MA's), (Start: 10 @31029 has 36 MA's), (23, 31083), (33, 31143),

Gene: BasketStar_59 Start: 34370, Stop: 34528, Start Num: 10

Candidate Starts for BasketStar_59:

(1, 34061), (Start: 5 @34337 has 1 MA's), (Start: 10 @34370 has 36 MA's), (33, 34484), (34, 34508),

Gene: BellaJr_47 Start: 31626, Stop: 31757, Start Num: 14

Candidate Starts for BellaJr_47:

(Start: 9 @31602 has 12 MA's), (11, 31608), (14, 31626), (30, 31692),

Gene: BenchScraper_56 Start: 33194, Stop: 33352, Start Num: 10

Candidate Starts for BenchScraper_56:

(Start: 5 @33161 has 1 MA's), (Start: 10 @33194 has 36 MA's), (33, 33308),

Gene: Bhageatrice_58 Start: 35468, Stop: 35626, Start Num: 10

Candidate Starts for Bhageatrice_58:

(Start: 5 @35435 has 1 MA's), (Start: 10 @35468 has 36 MA's), (33, 35582),

Gene: BillyTP_59 Start: 35066, Stop: 35224, Start Num: 10

Candidate Starts for BillyTP_59:

(1, 34757), (Start: 5 @35033 has 1 MA's), (Start: 10 @35066 has 36 MA's), (33, 35180), (34, 35204),

Gene: BlackSpider_44 Start: 30183, Stop: 30338, Start Num: 9

Candidate Starts for BlackSpider_44:

(Start: 9 @30183 has 12 MA's), (11, 30189), (14, 30207), (30, 30273),

Gene: BlueShadow_57 Start: 33856, Stop: 34014, Start Num: 10

Candidate Starts for BlueShadow_57:

(Start: 5 @33823 has 1 MA's), (Start: 10 @33856 has 36 MA's), (33, 33970), (34, 33994),

Gene: BrayBeast_40 Start: 27217, Stop: 27372, Start Num: 9

Candidate Starts for BrayBeast_40:

(2, 26914), (3, 26977), (Start: 5 @27187 has 1 MA's), (Start: 9 @27217 has 12 MA's), (17, 27247), (20, 27259), (28, 27289), (34, 27352),

Gene: Cassini_52 Start: 32555, Stop: 32704, Start Num: 10

Candidate Starts for Cassini_52:

(Start: 5 @32522 has 1 MA's), (Start: 10 @32555 has 36 MA's), (23, 32609), (24, 32615), (33, 32660), (34, 32684),

Gene: CookieBear_57 Start: 33450, Stop: 33608, Start Num: 10

Candidate Starts for CookieBear_57:

(1, 33141), (Start: 5 @33417 has 1 MA's), (Start: 10 @33450 has 36 MA's), (33, 33564), (34, 33588),

Gene: CosmicBrownie_52 Start: 31869, Stop: 32060, Start Num: 5

Candidate Starts for CosmicBrownie_52:

(Start: 5 @31869 has 1 MA's), (Start: 10 @31902 has 36 MA's), (17, 31935), (23, 31956), (33, 32016), (34, 32040),

Gene: Crescenzo_58 Start: 34595, Stop: 34744, Start Num: 10

Candidate Starts for Crescenzo_58:

(Start: 5 @34562 has 1 MA's), (Start: 10 @34595 has 36 MA's), (13, 34604), (17, 34625), (24, 34652),

Gene: DarwinJr_60 Start: 34663, Stop: 34791, Start Num: 10

Candidate Starts for DarwinJr_60:

(Start: 5 @34630 has 1 MA's), (Start: 10 @34663 has 36 MA's), (13, 34672), (17, 34693), (24, 34720),

Gene: DillyDally_39 Start: 27254, Stop: 27394, Start Num: 12

Candidate Starts for DillyDally_39:

(6, 27221), (Start: 12 @27254 has 1 MA's),

Gene: Ding_48 Start: 31794, Stop: 31949, Start Num: 9

Candidate Starts for Ding_48:

(Start: 5 @31764 has 1 MA's), (Start: 9 @31794 has 12 MA's), (17, 31824), (19, 31830), (25, 31854), (33, 31905),

Gene: EvePickles_53 Start: 33650, Stop: 33805, Start Num: 10

Candidate Starts for EvePickles_53:

(Start: 5 @33617 has 1 MA's), (Start: 10 @33650 has 36 MA's), (27, 33716),

Gene: Faja_58 Start: 35034, Stop: 35192, Start Num: 10

Candidate Starts for Faja_58:

(Start: 5 @35001 has 1 MA's), (Start: 10 @35034 has 36 MA's), (23, 35088), (33, 35148), (34, 35172),

Gene: Globfish_57 Start: 33549, Stop: 33707, Start Num: 10

Candidate Starts for Globfish_57:

(Start: 5 @33516 has 1 MA's), (Start: 10 @33549 has 36 MA's), (18, 33585), (23, 33603), (24, 33609), (33, 33663),

Gene: Gorpy_57 Start: 34442, Stop: 34600, Start Num: 10

Candidate Starts for Gorpy_57:

(Start: 5 @34409 has 1 MA's), (Start: 10 @34442 has 36 MA's), (33, 34556), (34, 34580),

Gene: GumGum_56 Start: 32584, Stop: 32736, Start Num: 10

Candidate Starts for GumGum_56:

(Start: 5 @32551 has 1 MA's), (Start: 10 @32584 has 36 MA's), (13, 32593), (24, 32641),

Gene: Hestia_50 Start: 31086, Stop: 31241, Start Num: 9

Candidate Starts for Hestia_50:

(4, 30954), (Start: 5 @31059 has 1 MA's), (Start: 9 @31086 has 12 MA's), (11, 31092), (30, 31176), (32, 31197),

Gene: Hillester_61 Start: 34795, Stop: 34953, Start Num: 10

Candidate Starts for Hillester_61:

(Start: 5 @34762 has 1 MA's), (Start: 10 @34795 has 36 MA's), (18, 34831), (23, 34849), (33, 34909), (34, 34933),

Gene: Isolde_56 Start: 33119, Stop: 33277, Start Num: 10

Candidate Starts for Isolde_56:

(1, 32810), (Start: 5 @33086 has 1 MA's), (Start: 10 @33119 has 36 MA's), (33, 33233), (34, 33257),

Gene: JeanClaude_43 Start: 26505, Stop: 26660, Start Num: 9

Candidate Starts for JeanClaude_43:

(8, 26493), (Start: 9 @26505 has 12 MA's), (16, 26529), (17, 26535), (20, 26547), (25, 26565), (26, 26568), (33, 26616),

Gene: JellyBread_54 Start: 32240, Stop: 32398, Start Num: 10

Candidate Starts for JellyBread_54:

(1, 31931), (Start: 5 @32207 has 1 MA's), (Start: 10 @32240 has 36 MA's), (33, 32354),

Gene: Kabloowy_57 Start: 34136, Stop: 34294, Start Num: 10

Candidate Starts for Kabloowy_57:

(Start: 5 @34103 has 1 MA's), (Start: 10 @34136 has 36 MA's), (33, 34250),

Gene: Lasker_56 Start: 33894, Stop: 34043, Start Num: 10

Candidate Starts for Lasker_56:

(1, 33585), (Start: 5 @33861 has 1 MA's), (Start: 10 @33894 has 36 MA's), (34, 34023), (35, 34032),

Gene: Lawnathon_58 Start: 33611, Stop: 33769, Start Num: 10

Candidate Starts for Lawnathon_58:

(Start: 5 @33578 has 1 MA's), (Start: 10 @33611 has 36 MA's), (33, 33725), (34, 33749),

Gene: LeBruni_56 Start: 32818, Stop: 32967, Start Num: 10

Candidate Starts for LeBruni_56:

(Start: 5 @32785 has 1 MA's), (Start: 10 @32818 has 36 MA's), (17, 32851), (24, 32878), (33, 32923), (34, 32947),

Gene: MUWow_57 Start: 33531, Stop: 33689, Start Num: 10

Candidate Starts for MUWow_57:

(Start: 5 @33498 has 1 MA's), (Start: 10 @33531 has 36 MA's), (33, 33645),

Gene: Mapleville_53 Start: 32942, Stop: 33091, Start Num: 10

Candidate Starts for Mapleville_53:

(1, 32633), (Start: 5 @32909 has 1 MA's), (Start: 10 @32942 has 36 MA's), (34, 33071), (35, 33080),

Gene: MaterMagnus_58 Start: 34044, Stop: 34202, Start Num: 10

Candidate Starts for MaterMagnus_58:

(Start: 5 @34011 has 1 MA's), (Start: 10 @34044 has 36 MA's), (23, 34098), (33, 34158),

Gene: MidnightRain_61 Start: 34972, Stop: 35121, Start Num: 10

Candidate Starts for MidnightRain_61:

(1, 34663), (Start: 5 @34939 has 1 MA's), (Start: 10 @34972 has 36 MA's), (34, 35101), (35, 35110),

Gene: MurphyJoseph_54 Start: 32347, Stop: 32529, Start Num: 5

Candidate Starts for MurphyJoseph_54:

(Start: 5 @32347 has 1 MA's), (Start: 10 @32380 has 36 MA's), (17, 32410), (27, 32446),

Gene: NewKitty_59 Start: 33315, Stop: 33473, Start Num: 10

Candidate Starts for NewKitty_59:

(Start: 5 @33282 has 1 MA's), (Start: 10 @33315 has 36 MA's), (23, 33369), (33, 33429), (34, 33453),

Gene: Nyilah_56 Start: 32058, Stop: 32216, Start Num: 10

Candidate Starts for Nyilah_56:

(Start: 5 @32025 has 1 MA's), (Start: 10 @32058 has 36 MA's), (33, 32172), (34, 32196),

Gene: Phrank15_58 Start: 33748, Stop: 33906, Start Num: 10

Candidate Starts for Phrank15_58:

(Start: 5 @33715 has 1 MA's), (Start: 10 @33748 has 36 MA's), (33, 33862), (34, 33886),

Gene: Pigu_38 Start: 26382, Stop: 26540, Start Num: 9

Candidate Starts for Pigu_38:

(Start: 5 @26352 has 1 MA's), (Start: 9 @26382 has 12 MA's), (16, 26412), (29, 26466),

Gene: RadFad_61 Start: 34795, Stop: 34953, Start Num: 10

Candidate Starts for RadFad_61:

(Start: 5 @34762 has 1 MA's), (Start: 10 @34795 has 36 MA's), (18, 34831), (23, 34849), (33, 34909), (34, 34933),

Gene: Raphaella_56 Start: 33054, Stop: 33212, Start Num: 10

Candidate Starts for Raphaella_56:

(Start: 5 @33021 has 1 MA's), (Start: 10 @33054 has 36 MA's), (33, 33168),

Gene: Raqqa_50 Start: 31059, Stop: 31217, Start Num: 10

Candidate Starts for Raqqa_50:

(Start: 5 @31026 has 1 MA's), (7, 31035), (Start: 10 @31059 has 36 MA's), (23, 31113), (33, 31173),

Gene: Richie_59 Start: 34120, Stop: 34272, Start Num: 10

Candidate Starts for Richie_59:

(1, 33811), (Start: 5 @34087 has 1 MA's), (Start: 10 @34120 has 36 MA's), (24, 34177),

Gene: Rooter_40 Start: 26755, Stop: 26895, Start Num: 9

Candidate Starts for Rooter_40:

(Start: 5 @26725 has 1 MA's), (Start: 9 @26755 has 12 MA's), (25, 26803),

Gene: Sakai_56 Start: 33153, Stop: 33311, Start Num: 10

Candidate Starts for Sakai_56:

(Start: 5 @33120 has 1 MA's), (Start: 10 @33153 has 36 MA's), (33, 33267), (34, 33291),

Gene: Sarge_38 Start: 25563, Stop: 25703, Start Num: 9

Candidate Starts for Sarge_38:

(Start: 9 @25563 has 12 MA's), (25, 25611),

Gene: Satrap_58 Start: 33582, Stop: 33731, Start Num: 10

Candidate Starts for Satrap_58:

(Start: 5 @33549 has 1 MA's), (Start: 10 @33582 has 36 MA's), (17, 33612), (27, 33648),

Gene: Seahorse_60 Start: 35386, Stop: 35529, Start Num: 9

Candidate Starts for Seahorse_60:

(Start: 9 @35386 has 12 MA's), (15, 35410), (17, 35419), (18, 35422), (21, 35437), (31, 35479),

Gene: Shoya_44 Start: 27531, Stop: 27671, Start Num: 9

Candidate Starts for Shoya_44:

(Start: 5 @27501 has 1 MA's), (Start: 9 @27531 has 12 MA's), (25, 27579),

Gene: SonDevVon_61 Start: 33726, Stop: 33917, Start Num: 5

Candidate Starts for SonDevVon_61:

(Start: 5 @33726 has 1 MA's), (Start: 10 @33759 has 36 MA's), (33, 33873), (34, 33897),

Gene: SpicyFrank_61 Start: 34658, Stop: 34807, Start Num: 10

Candidate Starts for SpicyFrank_61:

(Start: 5 @34625 has 1 MA's), (Start: 10 @34658 has 36 MA's), (33, 34763), (34, 34787),

Gene: Sporco_60 Start: 34608, Stop: 34757, Start Num: 10

Candidate Starts for Sporco_60:

(Start: 5 @34575 has 1 MA's), (Start: 10 @34608 has 36 MA's), (18, 34644), (24, 34668), (33, 34713),

Gene: ThayneTheZag_58 Start: 33227, Stop: 33376, Start Num: 10

Candidate Starts for ThayneTheZag_58:

(Start: 5 @33194 has 1 MA's), (Start: 10 @33227 has 36 MA's), (18, 33263), (23, 33281), (33, 33332), (34, 33356),

Gene: Tiff81_53 Start: 31564, Stop: 31722, Start Num: 10

Candidate Starts for Tiff81_53:

(Start: 5 @31531 has 1 MA's), (Start: 10 @31564 has 36 MA's), (18, 31600), (23, 31618), (33, 31678), (34, 31702),

Gene: Vopal_60 Start: 36689, Stop: 36838, Start Num: 10

Candidate Starts for Vopal_60:

(Start: 5 @36656 has 1 MA's), (Start: 10 @36689 has 36 MA's), (33, 36794),

Gene: Windest_59 Start: 32459, Stop: 32608, Start Num: 10

Candidate Starts for Windest_59:

(Start: 5 @32426 has 1 MA's), (Start: 10 @32459 has 36 MA's), (34, 32588), (35, 32597),

Gene: YoungHarleezy_57 Start: 33617, Stop: 33775, Start Num: 10

Candidate Starts for YoungHarleezy_57:

(1, 33308), (Start: 5 @33584 has 1 MA's), (Start: 10 @33617 has 36 MA's), (33, 33731),

Gene: Zucker_49 Start: 32109, Stop: 32264, Start Num: 9

Candidate Starts for Zucker_49:

(Start: 5 @32082 has 1 MA's), (Start: 9 @32109 has 12 MA's), (11, 32115),