

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 286985 Report

This analysis was run 03/28/26 on database version 641.

Pham number 286985 has 60 members, 17 are drafts.

Phages represented in each track:

- Track 1 : DarthPhader_18
- Track 2 : Refuge_20, Zimmer_19
- Track 3 : Jeeves_16
- Track 4 : Sunhee_15
- Track 5 : SororFago_16
- Track 6 : Gail_16
- Track 7 : Luchador_18
- Track 8 : Chargerpower_17
- Track 9 : Beemo_18, Phaeder_18, Ugenie5_15, Fayely_18, Ayanochan_19, Phonnegut_18, Sachima_16, EdogawaKiddo_16, ExplosioNervosa_18, Pioneer_18, Tubs_18, Scherzo_18, Lilleskat_16, Qobbit_18
- Track 10 : Maminiaina_18, BogosyJay_18, Elephantoon_18, Darrell_19
- Track 11 : EmyBug_18, Alma_18, Conquerage_18, Eidsmoe_18, Priya_18, Spouty_18
- Track 12 : Toaka_16
- Track 13 : CogOmlette_15, Rahalelujah_16, WorldCup_15, Bellris_15, Minispark_15
- Track 14 : Aliter_18, Myxus_18, Catalina_18, HortumSL17_18, PackMan_18
- Track 15 : SheaKeira_17, DreamTeam1_17, Klodlith_17, Charm_17
- Track 16 : Keziacharles14_16
- Track 17 : Arissanae_16
- Track 18 : Celestialunch_17, MegTheThird_16
- Track 19 : Hanray_17, RyeScarlet_19, Onglai_17, Horex_17
- Track 20 : Jiawan_17
- Track 21 : LoneWolf_18
- Track 22 : Yecey3_17
- Track 23 : Vanisoa_16

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

The start number called the most often in the published annotations is 16, it was called in 35 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alma_18, Arissanae_16, Ayanochan_19, Beemo_18, Bellris_15, BogosyJay_18, Celestiallunch_17, Chargerpower_17, Charm_17, CogOmlette_15, Conquerage_18, Darrell_19, DarthPhader_18, DreamTeam1_17, EdogawaKiddo_16, Eidsmoe_18, Elephantoon_18, EmyBug_18, ExplosioNervosa_18, Fayely_18, Hanray_17, Halex_17, Jiawan_17, Keziacharles14_16, Klodlith_17, Lilleskat_16, LoneWolf_18, Luchador_18, Maminiaina_18, MegTheThird_16, Minispark_15, Onglai_17, Phaeder_18, Phonnegut_18, Pioneer_18, Priya_18, Qobbit_18, Rahalelujah_16, Refuge_20, RyeScarlet_19, Sachima_16, Scherzo_18, SheaKeira_17, Spouty_18, Toaka_16, Tubs_18, Ugenie5_15, Vanisoa_16, WorldCup_15, Yecey3_17, Zimmer_19,

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

- Aliter_18, Catalina_18, HortumSL17_18, Myxus_18, PackMan_18,

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

- Gail_16, Jeeves_16, SororFago_16, Sunhee_15,

Summary by start number:

Start 10:

- Found in 27 of 60 (45.0%) of genes in pham
- Manual Annotations of this start: 5 of 43
- Called 18.5% of time when present
- Phage (with cluster) where this start called: Aliter_18 (A9), Catalina_18 (A9), HortumSL17_18 (A9), Myxus_18 (A9), PackMan_18 (A9),

Start 14:

- Found in 1 of 60 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gail_16 (A14),

Start 15:

- Found in 3 of 60 (5.0%) of genes in pham
- Manual Annotations of this start: 2 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jeeves_16 (A14), SororFago_16 (A14), Sunhee_15 (A14),

Start 16:

- Found in 56 of 60 (93.3%) of genes in pham
- Manual Annotations of this start: 35 of 43
- Called 91.1% of time when present
- Phage (with cluster) where this start called: Alma_18 (A9), Arissanae_16 (A9), Ayanochan_19 (A9), Beemo_18 (A9), Bellris_15 (A9), BogosyJay_18 (A9), Celestiallunch_17 (A9), Chargerpower_17 (A22), Charm_17 (A9), CogOmlette_15 (A9), Conquerage_18 (A9), Darrell_19 (A9), DarthPhader_18 (A12), DreamTeam1_17 (A9), EdogawaKiddo_16 (A9), Eidsmoe_18 (A9), Elephantoon_18 (A9), EmyBug_18 (A9), ExplosioNervosa_18 (A9), Fayely_18 (A9), Hanray_17 (A9), Halex_17 (A9), Jiawan_17 (A9), Keziacharles14_16 (A9), Klodlith_17 (A9), Lilleskat_16 (A9), LoneWolf_18 (A9), Luchador_18 (A14), Maminiaina_18 (A9), MegTheThird_16 (A9), Minispark_15 (A9), Onglai_17 (A9), Phaeder_18 (A9), Phonnegut_18 (A9), Pioneer_18 (A9), Priya_18 (A9), Qobbit_18 (A9), Rahalelujah_16 (A9), Refuge_20

(A12), RyeScarlet_19 (A9), Sachima_16 (A9), Scherzo_18 (A9), SheaKeira_17 (A9), Spouty_18 (A9), Toaka_16 (A9), Tubs_18 (A9), Ugenie5_15 (A9), Vanisoa_16 (A9), WorldCup_15 (A9), Yecey3_17 (A9), Zimmer_19 (A12),

Summary by clusters:

There are 4 clusters represented in this pham: A9, A14, A22, A12,

Info for manual annotations of cluster A12:

- Start number 16 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 14 was manually annotated 1 time for cluster A14.
- Start number 15 was manually annotated 2 times for cluster A14.
- Start number 16 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A22:

- Start number 16 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A9:

- Start number 10 was manually annotated 5 times for cluster A9.
- Start number 16 was manually annotated 30 times for cluster A9.

Gene Information:

Gene: Aliter_18 Start: 13817, Stop: 14065, Start Num: 10

Candidate Starts for Aliter_18:

(Start: 10 @13817 has 5 MA's), (Start: 16 @13841 has 35 MA's), (18, 13880), (22, 13931), (23, 13943), (24, 13991), (25, 14021),

Gene: Alma_18 Start: 13920, Stop: 14144, Start Num: 16

Candidate Starts for Alma_18:

(Start: 16 @13920 has 35 MA's), (18, 13959), (22, 14010), (23, 14022), (24, 14070), (25, 14100),

Gene: Arissanae_16 Start: 12012, Stop: 12230, Start Num: 16

Candidate Starts for Arissanae_16:

(Start: 16 @12012 has 35 MA's), (18, 12051),

Gene: Ayanochan_19 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for Ayanochan_19:

(Start: 10 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (18, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Beemo_18 Start: 13947, Stop: 14171, Start Num: 16

Candidate Starts for Beemo_18:

(Start: 10 @13923 has 5 MA's), (Start: 16 @13947 has 35 MA's), (18, 13986), (22, 14037), (23, 14049), (24, 14097), (25, 14127),

Gene: Bellris_15 Start: 11982, Stop: 12200, Start Num: 16

Candidate Starts for Bellris_15:

(2, 11913), (8, 11937), (Start: 10 @11958 has 5 MA's), (Start: 16 @11982 has 35 MA's), (18, 12021),

Gene: BogosyJay_18 Start: 13667, Stop: 13891, Start Num: 16
Candidate Starts for BogosyJay_18:
(Start: 16 @13667 has 35 MA's), (22, 13757), (23, 13769), (24, 13817), (25, 13847),

Gene: Catalina_18 Start: 13890, Stop: 14138, Start Num: 10
Candidate Starts for Catalina_18:
(Start: 10 @13890 has 5 MA's), (Start: 16 @13914 has 35 MA's), (18, 13953), (22, 14004), (23, 14016),
(24, 14064), (25, 14094),

Gene: Celestiallunch_17 Start: 12071, Stop: 12307, Start Num: 16
Candidate Starts for Celestiallunch_17:
(Start: 16 @12071 has 35 MA's), (19, 12131), (20, 12134),

Gene: Chargerpower_17 Start: 12361, Stop: 12588, Start Num: 16
Candidate Starts for Chargerpower_17:
(6, 12304), (Start: 10 @12337 has 5 MA's), (Start: 16 @12361 has 35 MA's), (18, 12400),

Gene: Charm_17 Start: 12095, Stop: 12319, Start Num: 16
Candidate Starts for Charm_17:
(Start: 16 @12095 has 35 MA's), (18, 12134),

Gene: CogOmlette_15 Start: 11982, Stop: 12200, Start Num: 16
Candidate Starts for CogOmlette_15:
(2, 11913), (8, 11937), (Start: 10 @11958 has 5 MA's), (Start: 16 @11982 has 35 MA's), (18, 12021),

Gene: Conquerage_18 Start: 13943, Stop: 14167, Start Num: 16
Candidate Starts for Conquerage_18:
(Start: 16 @13943 has 35 MA's), (18, 13982), (22, 14033), (23, 14045), (24, 14093), (25, 14123),

Gene: Darrell_19 Start: 14104, Stop: 14328, Start Num: 16
Candidate Starts for Darrell_19:
(Start: 16 @14104 has 35 MA's), (22, 14194), (23, 14206), (24, 14254), (25, 14284),

Gene: DarthPhader_18 Start: 14100, Stop: 14303, Start Num: 16
Candidate Starts for DarthPhader_18:
(11, 14076), (12, 14079), (Start: 16 @14100 has 35 MA's), (17, 14130),

Gene: DreamTeam1_17 Start: 12095, Stop: 12319, Start Num: 16
Candidate Starts for DreamTeam1_17:
(Start: 16 @12095 has 35 MA's), (18, 12134),

Gene: EdogawaKiddo_16 Start: 13913, Stop: 14137, Start Num: 16
Candidate Starts for EdogawaKiddo_16:
(Start: 10 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (18, 13952), (22, 14003), (23, 14015),
(24, 14063), (25, 14093),

Gene: Eidsmoe_18 Start: 13943, Stop: 14167, Start Num: 16
Candidate Starts for Eidsmoe_18:
(Start: 16 @13943 has 35 MA's), (18, 13982), (22, 14033), (23, 14045), (24, 14093), (25, 14123),

Gene: Elephantoon_18 Start: 13530, Stop: 13757, Start Num: 16
Candidate Starts for Elephantoon_18:

(Start: 16 @13530 has 35 MA's), (22, 13620), (23, 13632), (24, 13680), (25, 13710),

Gene: EmyBug_18 Start: 13943, Stop: 14167, Start Num: 16

Candidate Starts for EmyBug_18:

(Start: 16 @13943 has 35 MA's), (18, 13982), (22, 14033), (23, 14045), (24, 14093), (25, 14123),

Gene: ExplosioNervosa_18 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for ExplosioNervosa_18:

(Start: 10 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (18, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Fayely_18 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for Fayely_18:

(Start: 10 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (18, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Gail_16 Start: 12246, Stop: 12479, Start Num: 14

Candidate Starts for Gail_16:

(Start: 14 @12246 has 1 MA's), (18, 12288),

Gene: Hanray_17 Start: 13917, Stop: 14141, Start Num: 16

Candidate Starts for Hanray_17:

(3, 13851), (Start: 16 @13917 has 35 MA's), (18, 13956), (22, 14007), (23, 14019), (24, 14067), (25, 14097),

Gene: Horex_17 Start: 13917, Stop: 14141, Start Num: 16

Candidate Starts for Horex_17:

(3, 13851), (Start: 16 @13917 has 35 MA's), (18, 13956), (22, 14007), (23, 14019), (24, 14067), (25, 14097),

Gene: HortumSL17_18 Start: 13889, Stop: 14137, Start Num: 10

Candidate Starts for HortumSL17_18:

(Start: 10 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (18, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: Jeeves_16 Start: 12289, Stop: 12522, Start Num: 15

Candidate Starts for Jeeves_16:

(9, 12262), (Start: 15 @12289 has 2 MA's), (18, 12331),

Gene: Jiawan_17 Start: 13949, Stop: 14173, Start Num: 16

Candidate Starts for Jiawan_17:

(Start: 10 @13925 has 5 MA's), (Start: 16 @13949 has 35 MA's), (18, 13988), (22, 14039), (23, 14051), (25, 14129),

Gene: Keziacharles14_16 Start: 12056, Stop: 12274, Start Num: 16

Candidate Starts for Keziacharles14_16:

(Start: 16 @12056 has 35 MA's), (18, 12095),

Gene: Klodlith_17 Start: 12095, Stop: 12319, Start Num: 16

Candidate Starts for Klodlith_17:

(Start: 16 @12095 has 35 MA's), (18, 12134),

Gene: Lilleskat_16 Start: 13913, Stop: 14137, Start Num: 16

Candidate Starts for Lilleskat_16:

(Start: 10 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (18, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: LoneWolf_18 Start: 13722, Stop: 13946, Start Num: 16

Candidate Starts for LoneWolf_18:

(Start: 16 @13722 has 35 MA's), (20, 13785), (22, 13812), (23, 13824), (24, 13872), (25, 13902),

Gene: Luchador_18 Start: 13500, Stop: 13706, Start Num: 16

Candidate Starts for Luchador_18:

(1, 13191), (Start: 16 @13500 has 35 MA's), (18, 13539),

Gene: Maminiaina_18 Start: 13646, Stop: 13870, Start Num: 16

Candidate Starts for Maminiaina_18:

(Start: 16 @13646 has 35 MA's), (22, 13736), (23, 13748), (24, 13796), (25, 13826),

Gene: MegTheThird_16 Start: 12071, Stop: 12307, Start Num: 16

Candidate Starts for MegTheThird_16:

(Start: 16 @12071 has 35 MA's), (19, 12131), (20, 12134),

Gene: Minispark_15 Start: 11982, Stop: 12200, Start Num: 16

Candidate Starts for Minispark_15:

(2, 11913), (8, 11937), (Start: 10 @11958 has 5 MA's), (Start: 16 @11982 has 35 MA's), (18, 12021),

Gene: Myxus_18 Start: 13889, Stop: 14137, Start Num: 10

Candidate Starts for Myxus_18:

(Start: 10 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (18, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: Onglai_17 Start: 12247, Stop: 12471, Start Num: 16

Candidate Starts for Onglai_17:

(3, 12181), (Start: 16 @12247 has 35 MA's), (18, 12286), (22, 12337), (23, 12349), (24, 12397), (25, 12427),

Gene: PackMan_18 Start: 13889, Stop: 14137, Start Num: 10

Candidate Starts for PackMan_18:

(Start: 10 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (18, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: Phaeder_18 Start: 13913, Stop: 14137, Start Num: 16

Candidate Starts for Phaeder_18:

(Start: 10 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (18, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: Phonnegut_18 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for Phonnegut_18:

(Start: 10 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (18, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Pioneer_18 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for Pioneer_18:

(Start: 10 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (18, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Priya_18 Start: 13944, Stop: 14168, Start Num: 16
Candidate Starts for Priya_18:
(Start: 16 @13944 has 35 MA's), (18, 13983), (22, 14034), (23, 14046), (24, 14094), (25, 14124),

Gene: Qobbit_18 Start: 13943, Stop: 14167, Start Num: 16
Candidate Starts for Qobbit_18:
(Start: 10 @13919 has 5 MA's), (Start: 16 @13943 has 35 MA's), (18, 13982), (22, 14033), (23, 14045),
(24, 14093), (25, 14123),

Gene: Rahalelujah_16 Start: 11982, Stop: 12200, Start Num: 16
Candidate Starts for Rahalelujah_16:
(2, 11913), (8, 11937), (Start: 10 @11958 has 5 MA's), (Start: 16 @11982 has 35 MA's), (18, 12021),

Gene: Refuge_20 Start: 15497, Stop: 15685, Start Num: 16
Candidate Starts for Refuge_20:
(5, 15428), (11, 15473), (Start: 16 @15497 has 35 MA's), (17, 15527),

Gene: RyeScarlet_19 Start: 13917, Stop: 14141, Start Num: 16
Candidate Starts for RyeScarlet_19:
(3, 13851), (Start: 16 @13917 has 35 MA's), (18, 13956), (22, 14007), (23, 14019), (24, 14067), (25,
14097),

Gene: Sachima_16 Start: 13913, Stop: 14137, Start Num: 16
Candidate Starts for Sachima_16:
(Start: 10 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (18, 13952), (22, 14003), (23, 14015),
(24, 14063), (25, 14093),

Gene: Scherzo_18 Start: 13946, Stop: 14170, Start Num: 16
Candidate Starts for Scherzo_18:
(Start: 10 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (18, 13985), (22, 14036), (23, 14048),
(24, 14096), (25, 14126),

Gene: SheaKeira_17 Start: 12121, Stop: 12345, Start Num: 16
Candidate Starts for SheaKeira_17:
(Start: 16 @12121 has 35 MA's), (18, 12160),

Gene: SororFago_16 Start: 12265, Stop: 12498, Start Num: 15
Candidate Starts for SororFago_16:
(4, 12196), (7, 12211), (13, 12250), (Start: 15 @12265 has 2 MA's), (18, 12307),

Gene: Spouty_18 Start: 13943, Stop: 14167, Start Num: 16
Candidate Starts for Spouty_18:
(Start: 16 @13943 has 35 MA's), (18, 13982), (22, 14033), (23, 14045), (24, 14093), (25, 14123),

Gene: Sunhee_15 Start: 12301, Stop: 12534, Start Num: 15
Candidate Starts for Sunhee_15:
(Start: 15 @12301 has 2 MA's), (18, 12343),

Gene: Toaka_16 Start: 12274, Stop: 12492, Start Num: 16
Candidate Starts for Toaka_16:
(Start: 16 @12274 has 35 MA's), (18, 12313), (21, 12358),

Gene: Tubs_18 Start: 13913, Stop: 14137, Start Num: 16

Candidate Starts for Tubs_18:

(Start: 10 @13889 has 5 MA's), (Start: 16 @13913 has 35 MA's), (18, 13952), (22, 14003), (23, 14015), (24, 14063), (25, 14093),

Gene: Ugenie5_15 Start: 13946, Stop: 14170, Start Num: 16

Candidate Starts for Ugenie5_15:

(Start: 10 @13922 has 5 MA's), (Start: 16 @13946 has 35 MA's), (18, 13985), (22, 14036), (23, 14048), (24, 14096), (25, 14126),

Gene: Vanisoa_16 Start: 12000, Stop: 12218, Start Num: 16

Candidate Starts for Vanisoa_16:

(Start: 10 @11976 has 5 MA's), (Start: 16 @12000 has 35 MA's), (18, 12039),

Gene: WorldCup_15 Start: 11982, Stop: 12200, Start Num: 16

Candidate Starts for WorldCup_15:

(2, 11913), (8, 11937), (Start: 10 @11958 has 5 MA's), (Start: 16 @11982 has 35 MA's), (18, 12021),

Gene: Yecey3_17 Start: 12045, Stop: 12260, Start Num: 16

Candidate Starts for Yecey3_17:

(7, 11994), (Start: 16 @12045 has 35 MA's), (18, 12084), (21, 12129), (25, 12216),

Gene: Zimmer_19 Start: 14756, Stop: 14941, Start Num: 16

Candidate Starts for Zimmer_19:

(5, 14687), (11, 14732), (Start: 16 @14756 has 35 MA's), (17, 14786),