



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 296668 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 296668 has 48 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Lannister_29
- Track 2 : Nishikigoi_27, Haizum_27, Tefunt_27
- Track 3 : Marav_30
- Track 4 : GirlDinner_27, Animus_28, SqueakyClean_28, Janus_28
- Track 5 : Paolo_29, Zainub_29
- Track 6 : Diane_27
- Track 7 : Daudau_27
- Track 8 : Amethyst_27
- Track 9 : Axiom_28, Triumph_29
- Track 10 : Puginator_29
- Track 11 : Pablito_27
- Track 12 : Paedore_27
- Track 13 : Loofah_28
- Track 14 : Caelum_28
- Track 15 : Bowden_28
- Track 16 : ELB20_26
- Track 17 : R4_27
- Track 18 : Alvy_29, BartholomewSD_29
- Track 19 : Andris_27
- Track 20 : Issmi_28
- Track 21 : Superstar_30
- Track 22 : TinaBelcher_27, Thestral_28
- Track 23 : TrvxScott_26
- Track 24 : Jevington_29
- Track 25 : Hank144_28
- Track 26 : Omar_28
- Track 27 : Yosif_29
- Track 28 : GreenWeasel_29, BroPlease_28, phiHau3_29
- Track 29 : Celia_29, Itza_29, Urza_29
- Track 30 : VieEnRose_29
- Track 31 : Finalfrontier_26, BabyDaisy_26, Kate33_25
- Track 32 : Lilo27_25
- Track 33 : Pecas_25

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 28 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alvy_29, Amethyst_27, Andris_27, Animus_28, Axiom_28, BartholomewSD_29, Bowden_28, Caelum_28, Diane_27, GirlDinner_27, Haizum_27, Issmi_28, Janus_28, Jevington_29, Loofah_28, Marav_30, Nishikigoi_27, Omar_28, Paedore_27, Paolo_29, Puginator_29, SqueakyClean_28, Superstar_30, Tefunt_27, Thestral_28, TinaBelcher_27, Triumph_29, TrvxScott_26, Zainub_29,

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

- Daudau_27, Pablito_27,

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

- BabyDaisy_26, BroPlease_28, Celia_29, ELB20_26, Finalfrontier_26, GreenWeasel_29, Hank144_28, Itza_29, Kate33_25, Lannister_29, Lilo27_25, Pecas_25, R4_27, Urza_29, VieEnRose_29, Yosif_29, phiHau3_29,

Summary by start number:

Start 15:

- Found in 2 of 48 (4.2%) of genes in pham
- Manual Annotations of this start: 2 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daudau_27 (BD2), Pablito_27 (BD2),

Start 16:

- Found in 31 of 48 (64.6%) of genes in pham
- Manual Annotations of this start: 28 of 46
- Called 93.5% of time when present
- Phage (with cluster) where this start called: Alvy_29 (BD2), Amethyst_27 (BD2), Andris_27 (BD2), Animus_28 (BD2), Axiom_28 (BD2), BartholomewSD_29 (BD2), Bowden_28 (BD2), Caelum_28 (BD2), Diane_27 (BD2), GirlDinner_27 (BD2), Haizum_27 (BD2), Issmi_28 (BD2), Janus_28 (BD2), Jevington_29 (BD2), Loofah_28 (BD2), Marav_30 (BD2), Nishikigoi_27 (BD2), Omar_28 (BD2), Paedore_27 (BD2), Paolo_29 (BD2), Puginator_29 (BD2), SqueakyClean_28 (BD2), Superstar_30 (BD2), Tefunt_27 (BD2), Thestral_28 (BD2), TinaBelcher_27 (BD2), Triumph_29 (BD2), TrvxScott_26 (BD2), Zainub_29 (BD2),

Start 17:

- Found in 8 of 48 (16.7%) of genes in pham
- Manual Annotations of this start: 7 of 46
- Called 87.5% of time when present
- Phage (with cluster) where this start called: BroPlease_28 (BD4), GreenWeasel_29 (BD4), Hank144_28 (BD2), Lannister_29 (BD1), R4_27 (BD2), Yosif_29 (BD3), phiHau3_29 (BD4),

Start 19:

- Found in 4 of 48 (8.3%) of genes in pham
- Manual Annotations of this start: 4 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Celia_29 (BD6), Itza_29 (BD6), Urza_29 (BD6), VieEnRose_29 (BD6),

Start 21:

- Found in 8 of 48 (16.7%) of genes in pham
- Manual Annotations of this start: 1 of 46
- Called 12.5% of time when present
- Phage (with cluster) where this start called: ELB20_26 (BD2),

Start 24:

- Found in 5 of 48 (10.4%) of genes in pham
- Manual Annotations of this start: 4 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyDaisy_26 (EB), Finalfrontier_26 (EB), Kate33_25 (EB), Lilo27_25 (EB), Pecas_25 (EB),

Summary by clusters:

There are 6 clusters represented in this pham: EB, BD4, BD6, BD1, BD3, BD2,

Info for manual annotations of cluster BD1:

- Start number 17 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 15 was manually annotated 2 times for cluster BD2.
- Start number 16 was manually annotated 28 times for cluster BD2.
- Start number 17 was manually annotated 2 times for cluster BD2.
- Start number 21 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 17 was manually annotated 1 time for cluster BD3.

Info for manual annotations of cluster BD4:

- Start number 17 was manually annotated 3 times for cluster BD4.

Info for manual annotations of cluster BD6:

- Start number 19 was manually annotated 4 times for cluster BD6.

Info for manual annotations of cluster EB:

- Start number 24 was manually annotated 4 times for cluster EB.

Gene Information:

Gene: Alvy_29 Start: 22860, Stop: 23069, Start Num: 16

Candidate Starts for Alvy_29:

(Start: 16 @22860 has 28 MA's), (18, 22878), (Start: 21 @22899 has 1 MA's), (25, 22947), (29, 22971), (36, 23019),

Gene: Amethyst_27 Start: 22528, Stop: 22740, Start Num: 16

Candidate Starts for Amethyst_27:

(5, 22036), (9, 22156), (Start: 16 @22528 has 28 MA's), (18, 22546), (27, 22633),

Gene: Andris_27 Start: 22516, Stop: 22728, Start Num: 16

Candidate Starts for Andris_27:

(Start: 16 @22516 has 28 MA's), (27, 22621),

Gene: Animus_28 Start: 22858, Stop: 23064, Start Num: 16

Candidate Starts for Animus_28:

(Start: 16 @22858 has 28 MA's), (18, 22876), (27, 22963),

Gene: Axiom_28 Start: 22683, Stop: 22886, Start Num: 16

Candidate Starts for Axiom_28:

(Start: 16 @22683 has 28 MA's), (18, 22701), (27, 22788),

Gene: BabyDaisy_26 Start: 19813, Stop: 19992, Start Num: 24

Candidate Starts for BabyDaisy_26:

(14, 19762), (Start: 24 @19813 has 4 MA's), (35, 19915), (36, 19924),

Gene: BartholomewSD_29 Start: 22860, Stop: 23069, Start Num: 16

Candidate Starts for BartholomewSD_29:

(Start: 16 @22860 has 28 MA's), (18, 22878), (Start: 21 @22899 has 1 MA's), (25, 22947), (29, 22971), (36, 23019),

Gene: Bowden_28 Start: 22785, Stop: 22994, Start Num: 16

Candidate Starts for Bowden_28:

(Start: 16 @22785 has 28 MA's), (18, 22803), (Start: 21 @22824 has 1 MA's), (29, 22896), (36, 22944),

Gene: BroPlease_28 Start: 22457, Stop: 22663, Start Num: 17

Candidate Starts for BroPlease_28:

(12, 22388), (Start: 17 @22457 has 7 MA's), (35, 22595), (37, 22613), (39, 22631),

Gene: Caelum_28 Start: 22499, Stop: 22711, Start Num: 16

Candidate Starts for Caelum_28:

(2, 21806), (3, 21824), (Start: 16 @22499 has 28 MA's), (18, 22517), (27, 22604),

Gene: Celia_29 Start: 23000, Stop: 23194, Start Num: 19

Candidate Starts for Celia_29:

(10, 22868), (14, 22970), (Start: 19 @23000 has 4 MA's), (28, 23075), (31, 23087), (36, 23126), (37, 23135), (39, 23153),

Gene: Daudau_27 Start: 22524, Stop: 22754, Start Num: 15

Candidate Starts for Daudau_27:

(11, 22419), (14, 22521), (Start: 15 @22524 has 2 MA's), (Start: 16 @22530 has 28 MA's), (23, 22575), (27, 22635), (34, 22665), (35, 22680),

Gene: Diane_27 Start: 22864, Stop: 23076, Start Num: 16

Candidate Starts for Diane_27:

(5, 22369), (9, 22489), (Start: 16 @22864 has 28 MA's), (18, 22882), (27, 22969),

Gene: ELB20_26 Start: 22980, Stop: 23153, Start Num: 21

Candidate Starts for ELB20_26:

(Start: 17 @22941 has 7 MA's), (18, 22959), (Start: 21 @22980 has 1 MA's), (26, 23040), (27, 23046),

Gene: Finalfrontier_26 Start: 20179, Stop: 20358, Start Num: 24

Candidate Starts for Finalfrontier_26:

(14, 20128), (Start: 24 @20179 has 4 MA's), (35, 20281), (36, 20290),

Gene: GirlDinner_27 Start: 22520, Stop: 22726, Start Num: 16

Candidate Starts for GirlDinner_27:

(Start: 16 @22520 has 28 MA's), (18, 22538), (27, 22625),

Gene: GreenWeasel_29 Start: 22466, Stop: 22672, Start Num: 17

Candidate Starts for GreenWeasel_29:

(12, 22397), (Start: 17 @22466 has 7 MA's), (35, 22604), (37, 22622), (39, 22640),

Gene: Haizum_27 Start: 22538, Stop: 22750, Start Num: 16

Candidate Starts for Haizum_27:

(Start: 16 @22538 has 28 MA's), (18, 22556), (27, 22643),

Gene: Hank144_28 Start: 22954, Stop: 23166, Start Num: 17

Candidate Starts for Hank144_28:

(13, 22891), (Start: 17 @22954 has 7 MA's), (18, 22972), (27, 23059), (30, 23071),

Gene: Issmi_28 Start: 23141, Stop: 23353, Start Num: 16

Candidate Starts for Issmi_28:

(Start: 16 @23141 has 28 MA's), (18, 23162), (27, 23249), (29, 23255),

Gene: Itza_29 Start: 22914, Stop: 23108, Start Num: 19

Candidate Starts for Itza_29:

(10, 22782), (14, 22884), (Start: 19 @22914 has 4 MA's), (28, 22989), (31, 23001), (36, 23040), (37, 23049), (39, 23067),

Gene: Janus_28 Start: 22858, Stop: 23064, Start Num: 16

Candidate Starts for Janus_28:

(Start: 16 @22858 has 28 MA's), (18, 22876), (27, 22963),

Gene: Jevington_29 Start: 23193, Stop: 23402, Start Num: 16

Candidate Starts for Jevington_29:

(Start: 16 @23193 has 28 MA's), (18, 23211), (27, 23298),

Gene: Kate33_25 Start: 19636, Stop: 19815, Start Num: 24

Candidate Starts for Kate33_25:

(14, 19585), (Start: 24 @19636 has 4 MA's), (35, 19738), (36, 19747),

Gene: Lannister_29 Start: 22999, Stop: 23220, Start Num: 17

Candidate Starts for Lannister_29:

(Start: 17 @22999 has 7 MA's), (30, 23107), (38, 23164),

Gene: Lilo27_25 Start: 19648, Stop: 19824, Start Num: 24

Candidate Starts for Lilo27_25:

(14, 19597), (Start: 24 @19648 has 4 MA's), (33, 19726), (35, 19750), (36, 19759),

Gene: Loofah_28 Start: 22838, Stop: 23050, Start Num: 16

Candidate Starts for Loofah_28:

(1, 22157), (4, 22241), (Start: 16 @22838 has 28 MA's), (18, 22856), (Start: 21 @22877 has 1 MA's), (27, 22943),

Gene: Marav_30 Start: 23529, Stop: 23738, Start Num: 16

Candidate Starts for Marav_30:

(Start: 16 @23529 has 28 MA's), (18, 23547), (27, 23634),

Gene: Nishikigoi_27 Start: 22538, Stop: 22750, Start Num: 16

Candidate Starts for Nishikigoi_27:

(Start: 16 @22538 has 28 MA's), (18, 22556), (27, 22643),

Gene: Omar_28 Start: 22805, Stop: 23014, Start Num: 16

Candidate Starts for Omar_28:

(7, 22373), (Start: 16 @22805 has 28 MA's), (18, 22823), (20, 22838), (27, 22910),

Gene: Pablito_27 Start: 22406, Stop: 22624, Start Num: 15

Candidate Starts for Pablito_27:

(11, 22301), (14, 22403), (Start: 15 @22406 has 2 MA's), (Start: 16 @22412 has 28 MA's), (18, 22430), (27, 22517), (30, 22529),

Gene: Paedore_27 Start: 22838, Stop: 23050, Start Num: 16

Candidate Starts for Paedore_27:

(Start: 16 @22838 has 28 MA's), (18, 22856), (Start: 21 @22877 has 1 MA's), (27, 22943),

Gene: Paolo_29 Start: 23192, Stop: 23401, Start Num: 16

Candidate Starts for Paolo_29:

(Start: 16 @23192 has 28 MA's), (18, 23210),

Gene: Pecas_25 Start: 19672, Stop: 19848, Start Num: 24

Candidate Starts for Pecas_25:

(Start: 24 @19672 has 4 MA's), (33, 19750), (35, 19774), (36, 19783),

Gene: Puginator_29 Start: 23207, Stop: 23416, Start Num: 16

Candidate Starts for Puginator_29:

(Start: 16 @23207 has 28 MA's), (18, 23225), (27, 23312),

Gene: R4_27 Start: 22952, Stop: 23164, Start Num: 17

Candidate Starts for R4_27:

(Start: 17 @22952 has 7 MA's), (18, 22970), (Start: 21 @22991 has 1 MA's), (26, 23051), (27, 23057),

Gene: SqueakyClean_28 Start: 22784, Stop: 22990, Start Num: 16

Candidate Starts for SqueakyClean_28:

(Start: 16 @22784 has 28 MA's), (18, 22802), (27, 22889),

Gene: Superstar_30 Start: 23733, Stop: 23945, Start Num: 16

Candidate Starts for Superstar_30:

(6, 23250), (8, 23310), (Start: 16 @23733 has 28 MA's), (18, 23751), (27, 23838),

Gene: Tefunt_27 Start: 22541, Stop: 22753, Start Num: 16

Candidate Starts for Tefunt_27:

(Start: 16 @22541 has 28 MA's), (18, 22559), (27, 22646),

Gene: Thestral_28 Start: 22774, Stop: 22983, Start Num: 16
Candidate Starts for Thestral_28:
(Start: 16 @22774 has 28 MA's), (18, 22792), (29, 22885), (30, 22891), (35, 22924), (36, 22933),

Gene: TinaBelcher_27 Start: 22721, Stop: 22930, Start Num: 16
Candidate Starts for TinaBelcher_27:
(Start: 16 @22721 has 28 MA's), (18, 22739), (29, 22832), (30, 22838), (35, 22871), (36, 22880),

Gene: Triumph_29 Start: 22699, Stop: 22902, Start Num: 16
Candidate Starts for Triumph_29:
(Start: 16 @22699 has 28 MA's), (18, 22717), (27, 22804),

Gene: TrvxScott_26 Start: 22767, Stop: 22976, Start Num: 16
Candidate Starts for TrvxScott_26:
(Start: 16 @22767 has 28 MA's), (18, 22785), (Start: 21 @22806 has 1 MA's), (29, 22878), (36, 22926),

Gene: Urza_29 Start: 22935, Stop: 23129, Start Num: 19
Candidate Starts for Urza_29:
(10, 22803), (14, 22905), (Start: 19 @22935 has 4 MA's), (28, 23010), (31, 23022), (36, 23061), (37, 23070), (39, 23088),

Gene: VieEnRose_29 Start: 23003, Stop: 23209, Start Num: 19
Candidate Starts for VieEnRose_29:
(14, 22973), (Start: 19 @23003 has 4 MA's), (22, 23024), (31, 23105), (37, 23153), (39, 23171),

Gene: Yosif_29 Start: 23870, Stop: 24091, Start Num: 17
Candidate Starts for Yosif_29:
(Start: 17 @23870 has 7 MA's), (32, 23987),

Gene: Zainub_29 Start: 23156, Stop: 23365, Start Num: 16
Candidate Starts for Zainub_29:
(Start: 16 @23156 has 28 MA's), (18, 23174),

Gene: phiHau3_29 Start: 22430, Stop: 22636, Start Num: 17
Candidate Starts for phiHau3_29:
(12, 22361), (Start: 17 @22430 has 7 MA's), (35, 22568), (37, 22586), (39, 22604),