Pham 85901


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 85901 Report

This analysis was run 04/05/24 on database version 557.
Pham number 85901 has 43 members, 4 are drafts.
Phages represented in each track:

- Track 1 : Orchid_75, Kampe_76, PatrickStar_76, Gibbles_73
- Track 2 : Wizard_15, VanDeWege_16, PinkCoffee_15, Vālary_16, Nubi_15, KimmyK_15, Fugā_15, Fireball_16, Barb_15, Twister6_15, Evàmon_15, ClamChōwder_15, Phlop_15, RōgerDodgèr_16, Salvadōr_15, PullumCavea_15
- Track 3 : Jambalaya_15
- Track 4 : Gezellig_16, SmokingBunny_15, Togo_15, Halo3_16, Danyall_15
- Track 5 : Savbucketdawg_15, Portcullis_15, Shinji_15
- Track 6 : YungMoney_15, Arri_16
- Track 7 : Mutzi 15
- Track 8 : GMĀ̄_79
- Track 9 : Leroy_45, Horus_45, ODay_49, Apricot_44, Crater_47
- Track 10 : CheeseTouch_44
- Track 11 : Pupper_234
- Track 12 : CherryTomatoes_244
- Track 13 : SCentae_234
- Track 14 : Skog_52


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

The start number called the most often in the published annotations is 8 , it was called in 32 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot_44, Arri_16, Barb_15, CheeseTouch_44, CherryTomatoes_244,

ClamChōwder_15, Crater_47, Evamon_15, Fireball_16, Fugax_15, GMA3_79, Gibbles_73, Horus 45, Jambalaya_15, Kampe_76, KimmyK_15, Leroy_45, Nubi_15, ODay_49, Orchid_75, PatrickStar_76, Phlop_15, PinkCoffee_15, PullumCavea_15, Pupper_234, RogerDodger_16, SC̄entae_23̄̄, Salvador_15, Skog_52, Twister̄̄_15, Valary_16, VanDeWege_1 $\overline{6}$, Wizard_15, YungMoney_15,

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

- Danyall_15, Gezellig_16, Halo3_16, Mutzi_15, Portcullis_15, Savbucketdawg_15, Shinjí_15, SmokingBunny__15, Togo_15,

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

## Summary by start number:

Start 6:

- Found in 3 of 43 ( $7.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called $33.3 \%$ of time when present
- Phage (with cluster) where this start called: Mutzi_15 (DC1),

Start 7:

- Found in 25 of 43 (58.1\% ) of genes in pham
- Manual Annotations of this start: 4 of 39
- Called $20.0 \%$ of time when present
- Phage (with cluster) where this start called: Danyall_15 (DC1), Gezellig_16 (DC1), Halo3_16 (DC1), SmokingBunny_15 (DC1), Togo_15 (DC1),

Start 8:

- Found in 43 of 43 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 32 of 39
- Called $79.1 \%$ of time when present
- Phage (with cluster) where this start called: Apricot_44 (DN3), Arri_16 (DC1), Barb_15 (DC1), CheeseTouch_44 (DN1), CherryTomatoes 244 (DŌ), ClamChowder_15 (DC1), Crater_47 (DN3), Evamon_15 (DC̄1), Fireball_16 (DC1), Fugax_15 (DC11), GMA3_79 (DF̄2), Gibbles_73 (CX), Horus 45 (DN1), Jambalaya_15 (DC1), Kampe_76 (CX), KimmyK_15 (DC1), Leroy 45 (DN1), Nubi_15 (DC1), ODay_49 (DN), Orchid_75 (CX), PatrickStar_76 (CX), Phlop_15 (DC1), PinkCoffee 15 (DC1), PullumCavea_15 (DC1), Pupper 234 (DO), RogerDodger_16(DC1), SCentae_234 (DO), Salvador_15 (DC1), Skog_52 (DO), Twister6_15 ( $\overline{\mathrm{D} C 1})$, Valary_16 (DC1), VanDeWege_16 (DC1), Wizard_15 (DC1), YungMoney_15 (DC1),

Start 10:

- Found in 29 of 43 ( $67.4 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 39
- Called $10.3 \%$ of time when present
- Phage (with cluster) where this start called: Portcullis_15 (DC1), Savbucketdawg_15 (DC1), Shinji_15 (DC1),


## Summary by clusters:

There are 7 clusters represented in this pham: DN, DO, DF2, CX, DN1, DN3, DC1,
Info for manual annotations of cluster CX:

- Start number 8 was manually annotated 4 times for cluster CX.

Info for manual annotations of cluster DC1:

- Start number 6 was manually annotated 1 time for cluster DC1.
- Start number 7 was manually annotated 4 times for cluster DC1.
-Start number 8 was manually annotated 19 times for cluster DC1.
- Start number 10 was manually annotated 2 times for cluster DC1.

Info for manual annotations of cluster DN:

- Start number 8 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 8 was manually annotated 3 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 8 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DO:

- Start number 8 was manually annotated 3 times for cluster DO.


## Gene Information:

Gene: Apricot_44 Start: 30314, Stop: 30559, Start Num: 8
Candidate Starts for Apricot_44:
(Start: 8 @30314 has 32 MA's), (11, 30371), (18, 30497),
Gene: Arri_16 Start: 9695, Stop: 9922, Start Num: 8
Candidate Starts for Arri_16:
(Start: 6 @9683 has 1 MA's), (Start: 8 @9695 has 32 MA's), (Start: 10 @9734 has 2 MA's), (16, 9845),
Gene: Barb_15 Start: 9658, Stop: 9885, Start Num: 8
Candidate Starts for Barb_15:
(Start: 7 @9646 has 4 MA's), (Start: 8 @9658 has 32 MA's), (Start: 10 @9697 has 2 MA's), (16, 9808),
Gene: CheeseTouch_44 Start: 28673, Stop: 28903, Start Num: 8
Candidate Starts for CheeseTouch_44:
(Start: 8 @28673 has 32 MA's), (9, 28706), (11, 28730),
Gene: CherryTomatoes_244 Start: 151310, Stop: 151597, Start Num: 8
Candidate Starts for CherryTomatoes_244:
(3, 151220), (Start: 8 @151310 has 32 MA's), (14, 151412), (15, 151448), (19, 151499), (20, 151535),
Gene: ClamChowder_15 Start: 9658, Stop: 9885, Start Num: 8
Candidate Starts for ClamChowder_15:
(Start: 7 @9646 has 4 MA's), (Start: 8 @9658 has 32 MA's), (Start: 10 @9697 has 2 MA's), (16, 9808),
Gene: Crater_47 Start: 31321, Stop: 31566, Start Num: 8
Candidate Starts for Crater_47:
(Start: 8 @31321 has 32 MA's), (11, 31378), (18, 31504),
Gene: Danyall_15 Start: 9518, Stop: 9757, Start Num: 7
Candidate Starts for Danyall_15:
(Start: 7 @9518 has 4 MA's), (Start: 8 @9530 has 32 MA's), (Start: 10 @9569 has 2 MA's), (16, 9680),
Gene: Evamon_15 Start: 9503, Stop: 9730, Start Num: 8
Candidate Starts for Evamon_15:
(Start: 7 @9491 has 4 MA's), (Start: 8 @9503 has 32 MA's), (Start: 10 @9542 has 2 MA's), (16, 9653),

Gene: Fireball_16 Start: 9626, Stop: 9853, Start Num: 8
Candidate Starts for Fireball_16:
(Start: 7 @9614 has 4 MA's), (Start: 8 @9626 has 32 MA's), (Start: 10 @9665 has 2 MA's), (16, 9776),
Gene: Fugax_15 Start: 9658, Stop: 9885, Start Num: 8
Candidate Starts for Fugax_15:
(Start: 7 @9646 has 4 MA's), (Start: 8 @9658 has 32 MA's), (Start: 10 @9697 has 2 MA's), (16, 9808),
Gene: GMA3_79 Start: 59888, Stop: 59664, Start Num: 8
Candidate Starts for GMA3_79:
(5, 59915), (Start: 8 @59888 has 32 MA's), (13, 59798), (17, 59714),
Gene: Gezellig_16 Start: 9614, Stop: 9853, Start Num: 7
Candidate Starts for Gezellig_16:
(Start: 7 @9614 has 4 MA's), (Start: 8 @9626 has 32 MA's), (Start: 10 @9665 has 2 MA's), (16, 9776),
Gene: Gibbles_73 Start: 58742, Stop: 58521, Start Num: 8
Candidate Starts for Gibbles_73:
(Start: 8 @58742 has 32 MA's), $(18,58559)$,
Gene: Halo3_16 Start: 9944, Stop: 10183, Start Num: 7
Candidate Starts for Halo3_16:
(Start: 7 @9944 has 4 MA's), (Start: 8 @9956 has 32 MA's), (Start: 10 @9995 has 2 MA's), (16, 10106),

Gene: Horus_45 Start: 31928, Stop: 32173, Start Num: 8
Candidate Starts for Horus_45:
(Start: 8 @31928 has $\left.32 \mathrm{MA}^{\prime} \mathrm{s}\right),(11,31985),(18,32111)$,
Gene: Jambalaya_15 Start: 9328, Stop: 9552, Start Num: 8
Candidate Starts for Jambalaya_15:
(1, 9232), (2, 9238), (4, 9253), (Start: 7 @9316 has 4 MA's), (Start: 8 @9328 has 32 MA's), (Start: 10 @9367 has 2 MA's),

Gene: Kampe_76 Start: 59012, Stop: 58791, Start Num: 8
Candidate Starts for Kampe_76:
(Start: 8 @59012 has 32 MA's), (18, 58829),
Gene: KimmyK_15 Start: 9658, Stop: 9885, Start Num: 8
Candidate Starts for KimmyK_15:
(Start: 7 @9646 has 4 MA's), (Start: 8 @9658 has 32 MA's), (Start: 10 @9697 has 2 MA's), (16, 9808),
Gene: Leroy_45 Start: 31929, Stop: 32174, Start Num: 8
Candidate Starts for Leroy_45:
(Start: 8 @31929 has 32 MA's), $(11,31986),(18,32112)$,
Gene: Mutzi_15 Start: 9511, Stop: 9750, Start Num: 6
Candidate Starts for Mutzi_15:
(Start: 6 @9511 has 1 MA's), (Start: 8 @9523 has 32 MA's), (Start: 10 @9562 has 2 MA's), (16, 9673),
Gene: Nubi_15 Start: 9523, Stop: 9750, Start Num: 8
Candidate Starts for Nubi_15:
(Start: 7 @9511 has 4 MA's), (Start: 8 @9523 has 32 MA's), (Start: 10 @9562 has 2 MA's), (16, 9673),

Gene: ODay_49 Start: 32388, Stop: 32633, Start Num: 8
Candidate Starts for ODay_49:
(Start: 8 @32388 has 32 MA's), (11, 32445), (18, 32571),
Gene: Orchid_75 Start: 59013, Stop: 58792, Start Num: 8
Candidate Starts for Orchid_75:
(Start: 8 @59013 has 32 MA's), (18, 58830),
Gene: PatrickStar_76 Start: 59012, Stop: 58791, Start Num: 8
Candidate Starts for PatrickStar_76:
(Start: 8 @59012 has 32 MA's), (18, 58829),
Gene: Phlop_15 Start: 9626, Stop: 9853, Start Num: 8
Candidate Starts for Phlop_15:
(Start: 7 @9614 has 4 MA's), (Start: 8 @9626 has 32 MA's), (Start: 10 @9665 has 2 MA's), (16, 9776),
Gene: PinkCoffee_15 Start: 9667, Stop: 9894, Start Num: 8
Candidate Starts for PinkCoffee_15:
(Start: 7 @9655 has 4 MA's), (Start: 8 @9667 has 32 MA's), (Start: 10 @9706 has 2 MA's), (16, 9817),
Gene: Portcullis_15 Start: 9615, Stop: 9800, Start Num: 10
Candidate Starts for Portcullis_15:
(1, 9480), (2, 9486), (4, 9501), (Start: 7 @9564 has 4 MA's), (Start: 8 @9576 has 32 MA's), (Start: 10 @9615 has 2 MA's),

Gene: PullumCavea_15 Start: 9626, Stop: 9853, Start Num: 8
Candidate Starts for PullumCavea_15:
(Start: 7 @9614 has 4 MA's), (Start: 8 @9626 has 32 MA's), (Start: 10 @9665 has 2 MA's), (16, 9776),
Gene: Pupper_234 Start: 150495, Stop: 150782, Start Num: 8
Candidate Starts for Pupper_234:
(3, 150447), (Start: 8 @150495 has 32 MA's), (9, 150528), (14, 150597), (15, 150633), (20, 150720),
Gene: RogerDodger_16 Start: 9894, Stop: 10121, Start Num: 8
Candidate Starts for RogerDodger_16:
(Start: 7 @9882 has 4 MA's), (Start: 8 @9894 has 32 MA's), (Start: 10 @9933 has 2 MA's), (16, 10044),

Gene: SCentae_234 Start: 150981, Stop: 151268, Start Num: 8
Candidate Starts for SCentae_234:
(3, 150933), (Start: 8 @150981 has 32 MA's), (9, 151014), (14, 151083), (15, 151119), (19, 151170), (21, 151224),

Gene: Salvador_15 Start: 9501, Stop: 9728, Start Num: 8
Candidate Starts for Salvador_15:
(Start: 7 @9489 has 4 MA's), (Start: 8 @9501 has 32 MA's), (Start: 10 @9540 has 2 MA's), (16, 9651),
Gene: Savbucketdawg_15 Start: 9367, Stop: 9552, Start Num: 10
Candidate Starts for Savbucketdawg_15:
(1, 9232), (2, 9238), (4, 9253), (Start: 7 @9316 has 4 MA's), (Start: 8 @9328 has 32 MA's), (Start: 10 @9367 has 2 MA's),

Gene: Shinji_15 Start: 9556, Stop: 9741, Start Num: 10
Candidate Starts for Shinji_15:
(1, 9421), (2, 9427), (4, 9442), (Start: 7 @9505 has 4 MA's), (Start: 8 @9517 has 32 MA's), (Start: 10 @9556 has 2 MA's),

Gene: Skog_52 Start: 22410, Stop: 22652, Start Num: 8
Candidate Starts for Skog_52:
(Start: 8 @22410 has 32 MA's), (9, 22443), (Start: 10 @22449 has 2 MA's), (11, 22467), (12, 22488), (15, 22548), (20, 22632),

Gene: SmokingBunny_15 Start: 9489, Stop: 9728, Start Num: 7
Candidate Starts for SmokingBunny_15:
(Start: 7 @9489 has 4 MA's), (Start: 8 @9501 has 32 MA's), (Start: 10 @9540 has 2 MA's), (16, 9651),
Gene: Togo_15 Start: 9489, Stop: 9728, Start Num: 7
Candidate Starts for Togo_15:
(Start: 7 @9489 has 4 MA's), (Start: 8 @9501 has 32 MA's), (Start: 10 @9540 has 2 MA's), (16, 9651),
Gene: Twister6_15 Start: 9441, Stop: 9668, Start Num: 8
Candidate Starts for Twister6_15:
(Start: 7 @9429 has 4 MA's), (Start: 8 @9441 has 32 MA's), (Start: 10 @9480 has 2 MA's), (16, 9591),
Gene: Valary_16 Start: 9894, Stop: 10121, Start Num: 8
Candidate Starts for Valary_16:
(Start: 7 @9882 has 4 MA's), (Start: 8 @9894 has 32 MA's), (Start: 10 @9933 has 2 MA's), (16, 10044),

Gene: VanDeWege_16 Start: 9822, Stop: 10049, Start Num: 8
Candidate Starts for VanDeWege_16:
(Start: 7 @9810 has 4 MA's), (Start: 8 @9822 has 32 MA's), (Start: 10 @9861 has 2 MA's), (16, 9972),
Gene: Wizard_15 Start: 9626, Stop: 9853, Start Num: 8
Candidate Starts for Wizard_15:
(Start: 7 @9614 has 4 MA's), (Start: 8 @9626 has 32 MA's), (Start: 10 @9665 has 2 MA's), (16, 9776),
Gene: YungMoney_15 Start: 10582, Stop: 10809, Start Num: 8
Candidate Starts for YungMoney_15:
(Start: 6 @10570 has 1 MA's), (Start: 8 @10582 has 32 MA's), (Start: 10 @10621 has 2 MA's), (16, 10732),

