Pham 165112



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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 165112 Report

This analysis was run 07/09/24 on database version 566.
Pham number 165112 has 49 members, 11 are drafts.
Phages represented in each track:

- Track 1 : Romm_15, BirdInFrench_15, RobinRose_15, Wilca_15, Pepe25_14,

Kelcole_13, OneinaGillian_14, Tempo_14

- Track $\overline{2}$ : DonaldDuck_15
- Track 3 : Quammi_13, Phabia_15, Lonelysoil_14, Viceroy_14, SallyK_16, Namago_15, Mashley_12, Hyperion_13, Zagie_15, BabyDotz_14, Rudy_13, Casend 16 , Blab_13, Wheelie_14, Wayne3_15, AluminumJesus_13, Teehee_17, Kyva_18, Jehoshāphat_17, Squash_17, Row̄lf_11, Gazebo_14, Statler_16, StrawberryJamm_17, Judebell_17, Sillytadpoles_15
- Track 4 : Tissue_14, Llemily_15, Zhafia_18, Grassboy_16
- Track 5 : Phinky_20
- Track 6 : Fransoyer_16, SadLad_17, RubyRalph_16
- Track 7 : Fizzles_15
- Track 8 : Fregley_15, Marcie_19, CandC_13
- Track 9 : Altheas 17
- Track 10 : Nike_16


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

The start number called the most often in the published annotations is 1 , it was called in 31 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Altheas_17, AluminumJesus_13, BabyDotz_14, Blab_13, CandC_13, Casend_16, DonaldDuck_15, Fizzles_15, Fransoyer_16, Fregley_15, Gazebo_14, Hyperion_13, Jehoshaphat_17, Judebēll_17, Kyva_18, Lonelysoil_14, Marcie_19, Mashley_12, Namago_15, Phabia_15, Phinky_20, Quammi_13, R̄owlf_11, RūbyRalph_16, Rudy_13, SadLad_17, SallyK_16, Sillytadpoles_15, Squash_17, Statler_16, StrawberryJamm_17, Teehee_17, Viceroy_14, Wayne3_16, Wheelie_1 $\overline{4}$, Zagie_15,

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

- BirdInFrench_15, Grassboy_16, Kelcole_13, Llemily_15, Nike_16, OneinaGillian_14, Pepe25_14, RobinRosē_15, Romm_15, Tempo_14, Tissue_14, Wilca_15, Zhāfia_18,

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

## Summary by start number:

Start 1:

- Found in 49 of 49 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 31 of 38
- Called $73.5 \%$ of time when present
- Phage (with cluster) where this start called: Altheas_17 (EG), AluminumJesus_13 (EG), BabyDotz_14 (EG), Blab_13 (EG), CandC_13 (EG), Casend_16 (EG),
DonaldDuck_15(EG), Fizzles_15 (EG), Fransoyer_16 (EG), Fregley_15 (EG),
Gazebo_14 (EG), Hyperion_1 $\overline{3}$ (EG), Jehoshaphat_17 (EG), Judebell_17 (EG),
Kyva_18 (EG), Lonelysoil_14 (EG), Marcie_19 (EG), Mashley_12 (EG), Namago_15
(EG), Phabia_15 (EG), Phinky_20 (EG), Quammi_13 (EG), Rowlf_11 (EG),
RubyRalph_16 (EG), Rudy_13 (EG), SadLad_17(EG), SallyK_16 (EG),
Sillytadpoles 15 (EG), Squash_17 (EG), Statler_16 (EG), StrawberryJamm_17 (EG),
Teehee_17 (EG), Viceroy_14 (ĒG), Wayne3_16 (EG), Wheelie_14 (EG), Zāgie_15 (EG),

Start 2:

- Found in 33 of 49 ( $67.3 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called $12.1 \%$ of time when present
- Phage (with cluster) where this start called: Grassboy_16 (EG), Llemily_15 (EG), Tissue_14 (EG), Zhafia_18 (EG),

Start 4:

- Found in 44 of 49 ( $89.8 \%$ ) of genes in pham
- Manual Annotations of this start: 6 of 38
- Called $20.5 \%$ of time when present
- Phage (with cluster) where this start called: BirdInFrench_15 (EG), Kelcole_13 (EG),

Nike_16 (EG), OneinaGillian_14 (EG), Pepe25_14 (EG), RobinRose_15 (EG),
Romm_15 (EG), Tempo_14 (EG), Wilca_15 (EG),

## Summary by clusters:

There is one cluster represented in this pham: EG
Info for manual annotations of cluster EG:

- Start number 1 was manually annotated 31 times for cluster EG.
- Start number 2 was manually annotated 1 time for cluster EG.
- Start number 4 was manually annotated 6 times for cluster EG.


## Gene Information:

Gene: Altheas_17 Start: 5429, Stop: 5584, Start Num: 1
Candidate Starts for Altheas_17:
(Start: 1 @5429 has 31 MA's), (Start: 2 @5453 has 1 MA's), (7, 5504),
Gene: AluminumJesus_13 Start: 4629, Stop: 4784, Start Num: 1

Candidate Starts for AluminumJesus_13:
(Start: 1 @4629 has 31 MA's), (Start: 2 @4653 has 1 MA's), (Start: 4 @4671 has 6 MA's), (7, 4704),
Gene: BabyDotz_14 Start: 5086, Stop: 5241, Start Num: 1
Candidate Starts for BabyDotz_14:
(Start: 1 @ 5086 has 31 MA's), (Start: 2 @5110 has 1 MA's), (Start: 4 @5128 has 6 MA's), (7, 5161),
Gene: BirdInFrench_15 Start: 4183, Stop: 4311, Start Num: 4
Candidate Starts for BirdlnFrench_15:
(Start: 1 @4141 has 31 MA's), (Start: 4 @4183 has 6 MA's),
Gene: Blab_13 Start: 4411, Stop: 4566, Start Num: 1
Candidate Starts for Blab_13:
(Start: 1 @4411 has 31 MA's), (Start: 2 @4435 has 1 MA's), (Start: 4 @4453 has 6 MA's), (7, 4486),
Gene: CandC_13 Start: 3645, Stop: 3815, Start Num: 1
Candidate Starts for CandC_13:
(Start: 1 @ 3645 has 31 MA's), (Start: 4 @3687 has 6 MA's),
Gene: Casend_16 Start: 5383, Stop: 5538, Start Num: 1
Candidate Starts for Casend_16:
(Start: 1 @5383 has 31 MA's), (Start: 2 @5407 has 1 MA's), (Start: 4 @5425 has 6 MA's), (7, 5458),
Gene: DonaldDuck_15 Start: 4729, Stop: 4884, Start Num: 1
Candidate Starts for DonaldDuck_15:
(Start: 1 @4729 has 31 MA's), (Start: 2 @4753 has 1 MA's), (Start: 4 @4771 has 6 MA's), (6, 4789), (7, 4804),

Gene: Fizzles_15 Start: 4801, Stop: 4956, Start Num: 1
Candidate Starts for Fizzles_15:
(Start: 1 @4801 has 31 MA's), (Start: 4 @4843 has 6 MA's), (7, 4876), (9, 4936),
Gene: Fransoyer_16 Start: 4929, Stop: 5096, Start Num: 1
Candidate Starts for Fransoyer_16:
(Start: 1 @4929 has 31 MA's), ( 8,5034 ), ( 9,5064 ),
Gene: Fregley_15 Start: 4183, Stop: 4353, Start Num: 1
Candidate Starts for Fregley_15:
(Start: 1 @4183 has 31 MA's), (Start: 4 @4225 has 6 MA's),
Gene: Gazebo_14 Start: 4977, Stop: 5132, Start Num: 1
Candidate Starts for Gazebo_14:
(Start: 1 @ 4977 has 31 MA's), (Start: 2 @5001 has 1 MA's), (Start: 4 @5019 has 6 MA's), (7, 5052),
Gene: Grassboy_16 Start: 5441, Stop: 5572, Start Num: 2
Candidate Starts for Grassboy_16:
(Start: 1 @5417 has 31 MA's), (Start: 2 @5441 has 1 MA's), (Start: 4 @5459 has 6 MA's), (7, 5492),
Gene: Hyperion_13 Start: 4674, Stop: 4829, Start Num: 1
Candidate Starts for Hyperion_13:
(Start: 1 @4674 has 31 MA's), (Start: 2 @4698 has 1 MA's), (Start: 4 @4716 has 6 MA's), (7, 4749),
Gene: Jehoshaphat_17 Start: 5675, Stop: 5830, Start Num: 1

Candidate Starts for Jehoshaphat_17:
(Start: 1 @ 5675 has 31 MA's), (Start: 2 @5699 has 1 MA's), (Start: 4 @5717 has 6 MA's), (7, 5750),
Gene: Judebell_17 Start: 5201, Stop: 5356, Start Num: 1
Candidate Starts for Judebell_17:
(Start: 1 @5201 has 31 MA's), (Start: 2 @5225 has 1 MA's), (Start: 4 @5243 has 6 MA's), (7, 5276),
Gene: Kelcole_13 Start: 4081, Stop: 4206, Start Num: 4
Candidate Starts for Kelcole_13:
(Start: 1 @4039 has 31 MA's), (Start: 4 @4081 has 6 MA's),
Gene: Kyva_18 Start: 5452, Stop: 5607, Start Num: 1
Candidate Starts for Kyva_18:
(Start: 1 @5452 has 31 MA's), (Start: 2 @5476 has 1 MA's), (Start: 4 @5494 has 6 MA's), (7, 5527),
Gene: Llemily_15 Start: 4475, Stop: 4606, Start Num: 2
Candidate Starts for Llemily_15:
(Start: 1 @4451 has 31 MA's), (Start: 2 @4475 has 1 MA's), (Start: 4 @4493 has 6 MA's), (7, 4526),
Gene: Lonelysoil_14 Start: 4696, Stop: 4851, Start Num: 1
Candidate Starts for Lonelysoil_14:
(Start: 1 @4696 has 31 MA's), (Start: 2 @4720 has 1 MA's), (Start: 4 @ 4738 has 6 MA's), (7, 4771),
Gene: Marcie_19 Start: 4741, Stop: 4911, Start Num: 1
Candidate Starts for Marcie_19:
(Start: 1 @4741 has 31 MA's), (Start: 4 @4783 has 6 MA's),
Gene: Mashley_12 Start: 4491, Stop: 4646, Start Num: 1
Candidate Starts for Mashley_12:
(Start: 1 @ 4491 has 31 MA's), (Start: 2 @ 4515 has 1 MA's), (Start: 4 @ 4533 has 6 MA's), (7, 4566),
Gene: Namago_15 Start: 4508, Stop: 4663, Start Num: 1
Candidate Starts for Namago_15:
(Start: 1 @4508 has 31 MA's), (Start: 2 @4532 has 1 MA's), (Start: 4 @ 4550 has 6 MA's), (7, 4583),
Gene: Nike_16 Start: 5441, Stop: 5554, Start Num: 4
Candidate Starts for Nike_16:
(Start: 1 @5399 has 31 MA's), (Start: 2 @5423 has 1 MA's), (Start: 4 @5441 has 6 MA's), (7, 5474),
Gene: OneinaGillian_14 Start: 3757, Stop: 3885, Start Num: 4
Candidate Starts for OneinaGillian_14:
(Start: 1 @ 3715 has 31 MA's), (Start: 4 @3757 has 6 MA's),
Gene: Pepe25_14 Start: 4183, Stop: 4311, Start Num: 4
Candidate Starts for Pepe25_14:
(Start: 1 @ 4141 has 31 MA's), (Start: 4 @4183 has 6 MA's),
Gene: Phabia_15 Start: 4866, Stop: 5021, Start Num: 1
Candidate Starts for Phabia_15:
(Start: 1 @4866 has 31 MA's), (Start: 2 @4890 has 1 MA's), (Start: 4 @4908 has 6 MA's), (7, 4941),
Gene: Phinky_20 Start: 5491, Stop: 5649, Start Num: 1
Candidate Starts for Phinky_20:
(Start: 1 @ 5491 has 31 MA's), (3, 5524), (5, 5539), ( 9,5629 ),
Gene: Quammi_13 Start: 4440, Stop: 4595, Start Num: 1
Candidate Starts for Quammi_13:
(Start: 1 @4440 has 31 MA's), (Start: 2 @4464 has 1 MA's), (Start: 4 @4482 has 6 MA's), (7, 4515),
Gene: RobinRose_15 Start: 3910, Stop: 4038, Start Num: 4
Candidate Starts for RobinRose_15:
(Start: 1 @3868 has 31 MA's), (Start: 4 @3910 has 6 MA's),
Gene: Romm_15 Start: 3910, Stop: 4038, Start Num: 4
Candidate Starts for Romm_15:
(Start: 1 @3868 has 31 MA's), (Start: 4 @3910 has 6 MA's),
Gene: Rowlf_11 Start: 4206, Stop: 4361, Start Num: 1
Candidate Starts for Rowlf_11:
(Start: 1 @ 4206 has 31 MA's), (Start: 2 @ 4230 has 1 MA's), (Start: 4 @ 4248 has 6 MA's), ( 7,4281 ),
Gene: RubyRalph_16 Start: 4863, Stop: 5030, Start Num: 1
Candidate Starts for RubyRalph_16:
(Start: 1 @4863 has 31 MA's), ( 8,4968 ), (9, 4998),
Gene: Rudy_13 Start: 4440, Stop: 4595, Start Num: 1
Candidate Starts for Rudy_13:
(Start: 1 @4440 has 31 MA's), (Start: 2 @4464 has 1 MA's), (Start: 4 @4482 has 6 MA's), (7, 4515),
Gene: SadLad_17 Start: 5320, Stop: 5487, Start Num: 1
Candidate Starts for SadLad_17:
(Start: 1 @5320 has 31 MA's), ( 8,5425 ), ( 9,5455 ),
Gene: SallyK_16 Start: 5601, Stop: 5756, Start Num: 1
Candidate Starts for SallyK_16:
(Start: 1 @5601 has 31 MA's), (Start: 2 @5625 has 1 MA's), (Start: 4 @5643 has 6 MA's), (7, 5676),
Gene: Sillytadpoles_15 Start: 4438, Stop: 4593, Start Num: 1
Candidate Starts for Sillytadpoles_15:
(Start: 1 @4438 has 31 MA's), (Start: 2 @4462 has 1 MA's), (Start: 4 @4480 has 6 MA's), (7, 4513),
Gene: Squash_17 Start: 5454, Stop: 5609, Start Num: 1
Candidate Starts for Squash_17:
(Start: 1 @5454 has 31 MA's), (Start: 2 @5478 has 1 MA's), (Start: 4 @5496 has 6 MA's), (7, 5529),
Gene: Statler_16 Start: 4974, Stop: 5129, Start Num: 1
Candidate Starts for Statler_16:
(Start: 1 @4974 has 31 MA's), (Start: 2 @4998 has 1 MA's), (Start: 4 @5016 has 6 MA's), (7, 5049),
Gene: StrawberryJamm_17 Start: 4740, Stop: 4895, Start Num: 1
Candidate Starts for StrawberryJamm_17:
(Start: 1 @4740 has 31 MA's), (Start: 2 @4764 has 1 MA's), (Start: 4 @4782 has 6 MA's), (7, 4815),
Gene: Teehee_17 Start: 5675, Stop: 5830, Start Num: 1
Candidate Starts for Teehee_17:
(Start: 1 @5675 has 31 MA's), (Start: 2 @5699 has 1 MA's), (Start: 4 @5717 has 6 MA's), (7, 5750),

Gene: Tempo_14 Start: 4105, Stop: 4233, Start Num: 4 Candidate Starts for Tempo_14:
(Start: 1 @ 4063 has 31 MA's), (Start: 4 @ 4105 has 6 MA's),
Gene: Tissue_14 Start: 4830, Stop: 4961, Start Num: 2
Candidate Starts for Tissue_14:
(Start: 1 @4806 has 31 MA's), (Start: 2 @4830 has 1 MA's), (Start: 4 @4848 has 6 MA's), (7, 4881),
Gene: Viceroy_14 Start: 4440, Stop: 4595, Start Num: 1
Candidate Starts for Viceroy_14:
(Start: 1 @4440 has 31 MA's), (Start: 2 @4464 has 1 MA's), (Start: 4 @4482 has 6 MA's), (7, 4515),
Gene: Wayne3_16 Start: 5378, Stop: 5533, Start Num: 1
Candidate Starts for Wayne3_16:
(Start: 1 @ 5378 has 31 MA's), (Start: 2 @5402 has 1 MA's), (Start: 4 @5420 has 6 MA's), (7, 5453),
Gene: Wheelie_14 Start: 4729, Stop: 4884, Start Num: 1
Candidate Starts for Wheelie_14:
(Start: 1 @4729 has 31 MA's), (Start: 2 @ 4753 has 1 MA's), (Start: 4 @ 4771 has 6 MA's), (7, 4804),
Gene: Wilca_15 Start: 4183, Stop: 4311, Start Num: 4
Candidate Starts for Wilca_15:
(Start: 1 @ 4141 has 31 MA's), (Start: 4 @4183 has 6 MA's),
Gene: Zagie_15 Start: 4943, Stop: 5098, Start Num: 1
Candidate Starts for Zagie_15:
(Start: 1 @4943 has 31 MA's), (Start: 2 @4967 has 1 MA's), (Start: 4 @4985 has 6 MA's), (7, 5018),
Gene: Zhafia_18 Start: 5202, Stop: 5333, Start Num: 2
Candidate Starts for Zhafia_18:
(Start: 1 @5178 has 31 MA's), (Start: 2 @5202 has 1 MA's), (Start: 4 @5220 has 6 MA's), (7, 5253),

