



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 255856 Report

This analysis was run 02/07/26 on database version 634.

Pham number 255856 has 55 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Lakshmi_3
- Track 2 : Glenn_3, Fluke_3, Scuttle_3, Cholula_3, Immaculata_3, Potatoes_3, Savage2526_3, MeganNo1_3, RAP15_3
- Track 3 : Misaeng_3, GreenHearts_3
- Track 4 : Oxyntus_3
- Track 5 : PartyCup_3
- Track 6 : Kalizoi_3, Zorro_3, Carpal_3, BrotherBLo_3, Dino_3, Korra_3
- Track 7 : CallieOMalley_3
- Track 8 : Suppi_3
- Track 9 : Albanese_3
- Track 10 : MrBoss_3, Litotes_3
- Track 11 : Joann_3
- Track 12 : Wawa_3
- Track 13 : Canowicakte_3
- Track 14 : Nubia_3
- Track 15 : RcigaStruga_3, Huntingdon_3
- Track 16 : Graynor_3
- Track 17 : AppleCider_3
- Track 18 : Jumboset_3
- Track 19 : Vallejo_3, Rozby_3, Riverdale_3
- Track 20 : Greenhouse_3
- Track 21 : Beethoven_3
- Track 22 : TattModd_3
- Track 23 : MrGloopy_3
- Track 24 : Wayne_3
- Track 25 : Wheelbite_29
- Track 26 : Laroye_30
- Track 27 : PeteyPab_27, PotatoChip_28, Zion_28
- Track 28 : PSonyx_25
- Track 29 : HorseRider_16
- Track 30 : Flashwig_17
- Track 31 : CarefulCloud_16
- Track 32 : Jalloh_16
- Track 33 : CyranoPS_16
- Track 34 : TailX7_16
- Track 35 : Spartan_23

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

The start number called the most often in the published annotations is 11, it was called in 40 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Albanese_3, AppleCider_3, Beethoven_3, BrotherBLo_3, CallieOMalley_3, Canowicakte_3, Carpal_3, Cholula_3, Dino_3, Fluke_3, Glenn_3, Graynor_3, GreenHearts_3, Huntingdon_3, Immaculata_3, Joann_3, Jumboset_3, Kalizoi_3, Korra_3, Lakshmi_3, Laroye_30, Litotes_3, MeganNoll_3, Misaeng_3, MrBoss_3, MrGloopy_3, Nubia_3, Oxynfrius_3, PartyCup_3, Potatoes_3, RAP15_3, RcigaStruga_3, Riverdale_3, Rozby_3, Savage2526_3, Scuttle_3, TattModd_3, Vallejo_3, Wawa_3, Wayne_3, Wheelbite_29, Zorro_3,

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

- Greenhouse_3,

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

- CarefulCloud_16, CyranoPS_16, Flashwig_17, HorseRider_16, Jalloh_16, PSonyx_25, PeteyPab_27, PotatoChip_28, Spartan_23, Suppi_3, TailX7_16, Zion_28,

Summary by start number:

Start 8:

- Found in 2 of 55 (3.6%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: TailX7_16 (ER),

Start 9:

- Found in 5 of 55 (9.1%) of genes in pham
- Manual Annotations of this start: 4 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PSonyx_25 (EQ), PeteyPab_27 (EN), PotatoChip_28 (EN), Spartan_23 (ES), Zion_28 (EN),

Start 10:

- Found in 8 of 55 (14.5%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 62.5% of time when present
- Phage (with cluster) where this start called: CarefulCloud_16 (ER), CyranoPS_16 (ER), Flashwig_17 (ER), HorseRider_16 (ER), Jalloh_16 (ER),

Start 11:

- Found in 43 of 55 (78.2%) of genes in pham
- Manual Annotations of this start: 40 of 47
- Called 97.7% of time when present
- Phage (with cluster) where this start called: Albanese_3 (AK), AppleCider_3 (AK), Beethoven_3 (AK), BrotherBLo_3 (AK), CallieOMalley_3 (AK), Canowicakte_3 (AK),

Carpal_3 (AK), Cholula_3 (AK), Dino_3 (AK), Fluke_3 (AK), Glenn_3 (AK), Graynor_3 (AK), GreenHearts_3 (AK), Huntingdon_3 (AK), Immaculata_3 (AK), Joann_3 (AK), Jumboset_3 (AK), Kalizoi_3 (AK), Korra_3 (AK), Lakshmi_3 (AK), Laroye_30 (AL), Litotes_3 (AK), MeganNoll_3 (AK), Misaeng_3 (AK), MrBoss_3 (AK), MrGloopy_3 (AK), Nubia_3 (AK), Oxynfrius_3 (AK), PartyCup_3 (AK), Potatoes_3 (AK), RAP15_3 (AK), RcigaStruga_3 (AK), Riverdale_3 (AK), Rozby_3 (AK), Savage2526_3 (AK), Scuttle_3 (AK), TattModd_3 (AK), Vallejo_3 (AK), Wawa_3 (AK), Wayne_3 (AK), Wheelbite_29 (AL), Zorro_3 (AK),

Start 13:

- Found in 46 of 55 (83.6%) of genes in pham
- Manual Annotations of this start: 2 of 47
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Greenhouse_3 (AK), Suppi_3 (AK),

Summary by clusters:

There are 6 clusters represented in this pham: EN, AK, AL, EQ, ES, ER,

Info for manual annotations of cluster AK:

- Start number 11 was manually annotated 38 times for cluster AK.
- Start number 13 was manually annotated 2 times for cluster AK.

Info for manual annotations of cluster AL:

- Start number 11 was manually annotated 2 times for cluster AL.

Info for manual annotations of cluster EN:

- Start number 9 was manually annotated 3 times for cluster EN.

Info for manual annotations of cluster EQ:

- Start number 9 was manually annotated 1 time for cluster EQ.

Info for manual annotations of cluster ER:

- Start number 10 was manually annotated 1 time for cluster ER.

Gene Information:

Gene: Albanese_3 Start: 2596, Stop: 2772, Start Num: 11

Candidate Starts for Albanese_3:

(Start: 11 @2596 has 40 MA's), (Start: 13 @2611 has 2 MA's), (18, 2650), (25, 2704),

Gene: AppleCider_3 Start: 2533, Stop: 2709, Start Num: 11

Candidate Starts for AppleCider_3:

(7, 2473), (Start: 11 @2533 has 40 MA's), (Start: 13 @2548 has 2 MA's), (17, 2584), (24, 2635), (25, 2641), (26, 2644),

Gene: Beethoven_3 Start: 2539, Stop: 2715, Start Num: 11

Candidate Starts for Beethoven_3:

(6, 2479), (Start: 11 @2539 has 40 MA's), (Start: 13 @2554 has 2 MA's), (24, 2641), (25, 2647),

Gene: BrotherBLo_3 Start: 2545, Stop: 2721, Start Num: 11

Candidate Starts for BrotherBLo_3:

(6, 2485), (Start: 11 @2545 has 40 MA's), (Start: 13 @2560 has 2 MA's), (18, 2599), (24, 2647), (25, 2653),

Gene: CallieOMalley_3 Start: 2533, Stop: 2709, Start Num: 11

Candidate Starts for CallieOMalley_3:

(7, 2473), (Start: 11 @2533 has 40 MA's), (Start: 13 @2548 has 2 MA's), (17, 2584), (24, 2635), (25, 2641),

Gene: Canowicakte_3 Start: 2568, Stop: 2744, Start Num: 11

Candidate Starts for Canowicakte_3:

(Start: 11 @2568 has 40 MA's), (Start: 13 @2583 has 2 MA's), (17, 2619), (24, 2670), (25, 2676),

Gene: CarefulCloud_16 Start: 11260, Stop: 11478, Start Num: 10

Candidate Starts for CarefulCloud_16:

(Start: 10 @11260 has 1 MA's), (30, 11416),

Gene: Carpal_3 Start: 2545, Stop: 2721, Start Num: 11

Candidate Starts for Carpal_3:

(6, 2485), (Start: 11 @2545 has 40 MA's), (Start: 13 @2560 has 2 MA's), (18, 2599), (24, 2647), (25, 2653),

Gene: Cholula_3 Start: 2590, Stop: 2766, Start Num: 11

Candidate Starts for Cholula_3:

(6, 2530), (Start: 11 @2590 has 40 MA's), (Start: 13 @2605 has 2 MA's), (24, 2692), (25, 2698),

Gene: CyranoPS_16 Start: 11343, Stop: 11537, Start Num: 10

Candidate Starts for CyranoPS_16:

(Start: 10 @11343 has 1 MA's), (16, 11388),

Gene: Dino_3 Start: 2545, Stop: 2721, Start Num: 11

Candidate Starts for Dino_3:

(6, 2485), (Start: 11 @2545 has 40 MA's), (Start: 13 @2560 has 2 MA's), (18, 2599), (24, 2647), (25, 2653),

Gene: Flashwig_17 Start: 11887, Stop: 12096, Start Num: 10

Candidate Starts for Flashwig_17:

(8, 11833), (Start: 10 @11887 has 1 MA's),

Gene: Fluke_3 Start: 2586, Stop: 2762, Start Num: 11

Candidate Starts for Fluke_3:

(6, 2526), (Start: 11 @2586 has 40 MA's), (Start: 13 @2601 has 2 MA's), (24, 2688), (25, 2694),

Gene: Glenn_3 Start: 2596, Stop: 2772, Start Num: 11

Candidate Starts for Glenn_3:

(6, 2536), (Start: 11 @2596 has 40 MA's), (Start: 13 @2611 has 2 MA's), (24, 2698), (25, 2704),

Gene: Graynor_3 Start: 2557, Stop: 2733, Start Num: 11

Candidate Starts for Graynor_3:

(Start: 11 @2557 has 40 MA's), (Start: 13 @2572 has 2 MA's), (17, 2608), (24, 2659), (25, 2665),

Gene: GreenHearts_3 Start: 2596, Stop: 2772, Start Num: 11

Candidate Starts for GreenHearts_3:

(Start: 11 @2596 has 40 MA's), (Start: 13 @2611 has 2 MA's), (25, 2704),

Gene: Greenhouse_3 Start: 2580, Stop: 2741, Start Num: 13

Candidate Starts for Greenhouse_3:

(Start: 11 @2565 has 40 MA's), (Start: 13 @2580 has 2 MA's), (25, 2673),

Gene: HorseRider_16 Start: 11322, Stop: 11537, Start Num: 10

Candidate Starts for HorseRider_16:

(Start: 10 @11322 has 1 MA's), (16, 11367), (20, 11385),

Gene: Huntingdon_3 Start: 2544, Stop: 2720, Start Num: 11

Candidate Starts for Huntingdon_3:

(Start: 11 @2544 has 40 MA's), (Start: 13 @2559 has 2 MA's), (17, 2595), (25, 2652),

Gene: Immaculata_3 Start: 2590, Stop: 2766, Start Num: 11

Candidate Starts for Immaculata_3:

(6, 2530), (Start: 11 @2590 has 40 MA's), (Start: 13 @2605 has 2 MA's), (24, 2692), (25, 2698),

Gene: Jalloh_16 Start: 11186, Stop: 11380, Start Num: 10

Candidate Starts for Jalloh_16:

(Start: 10 @11186 has 1 MA's), (Start: 13 @11201 has 2 MA's),

Gene: Joann_3 Start: 2536, Stop: 2712, Start Num: 11

Candidate Starts for Joann_3:

(5, 2458), (Start: 11 @2536 has 40 MA's), (Start: 13 @2551 has 2 MA's), (18, 2590), (25, 2644),

Gene: Jumboset_3 Start: 2539, Stop: 2715, Start Num: 11

Candidate Starts for Jumboset_3:

(6, 2479), (Start: 11 @2539 has 40 MA's), (Start: 13 @2554 has 2 MA's), (24, 2641), (25, 2647),

Gene: Kalizoi_3 Start: 2539, Stop: 2715, Start Num: 11

Candidate Starts for Kalizoi_3:

(6, 2479), (Start: 11 @2539 has 40 MA's), (Start: 13 @2554 has 2 MA's), (18, 2593), (24, 2641), (25, 2647),

Gene: Korra_3 Start: 2545, Stop: 2721, Start Num: 11

Candidate Starts for Korra_3:

(6, 2485), (Start: 11 @2545 has 40 MA's), (Start: 13 @2560 has 2 MA's), (18, 2599), (24, 2647), (25, 2653),

Gene: Lakshmi_3 Start: 2572, Stop: 2748, Start Num: 11

Candidate Starts for Lakshmi_3:

(Start: 11 @2572 has 40 MA's), (Start: 13 @2587 has 2 MA's), (25, 2680),

Gene: Laroye_30 Start: 22689, Stop: 22868, Start Num: 11

Candidate Starts for Laroye_30:

(1, 22272), (2, 22578), (3, 22593), (Start: 11 @22689 has 40 MA's),

Gene: Litotes_3 Start: 2521, Stop: 2697, Start Num: 11

Candidate Starts for Litotes_3:

(Start: 10 @2518 has 1 MA's), (Start: 11 @2521 has 40 MA's), (Start: 13 @2536 has 2 MA's), (17, 2572), (24, 2623), (25, 2629), (26, 2632),

Gene: MeganNoll_3 Start: 2596, Stop: 2772, Start Num: 11

Candidate Starts for MeganNoll_3:

(6, 2536), (Start: 11 @2596 has 40 MA's), (Start: 13 @2611 has 2 MA's), (24, 2698), (25, 2704),

Gene: Misaeng_3 Start: 2609, Stop: 2785, Start Num: 11

Candidate Starts for Misaeng_3:

(Start: 11 @2609 has 40 MA's), (Start: 13 @2624 has 2 MA's), (25, 2717),

Gene: MrBoss_3 Start: 2521, Stop: 2697, Start Num: 11

Candidate Starts for MrBoss_3:

(Start: 10 @2518 has 1 MA's), (Start: 11 @2521 has 40 MA's), (Start: 13 @2536 has 2 MA's), (17, 2572), (24, 2623), (25, 2629), (26, 2632),

Gene: MrGloopy_3 Start: 2529, Stop: 2705, Start Num: 11

Candidate Starts for MrGloopy_3:

(6, 2469), (Start: 11 @2529 has 40 MA's), (Start: 13 @2544 has 2 MA's), (22, 2616), (24, 2631), (25, 2637),

Gene: Nubia_3 Start: 2532, Stop: 2708, Start Num: 11

Candidate Starts for Nubia_3:

(Start: 11 @2532 has 40 MA's), (Start: 13 @2547 has 2 MA's), (18, 2586), (25, 2640),

Gene: Oxynfrius_3 Start: 2545, Stop: 2721, Start Num: 11

Candidate Starts for Oxynfrius_3:

(Start: 11 @2545 has 40 MA's), (Start: 13 @2560 has 2 MA's), (18, 2599), (25, 2653),

Gene: PSonyx_25 Start: 25681, Stop: 25920, Start Num: 9

Candidate Starts for PSonyx_25:

(Start: 9 @25681 has 4 MA's), (19, 25750), (20, 25756), (27, 25825), (28, 25831), (29, 25843), (30, 25846),

Gene: PartyCup_3 Start: 2568, Stop: 2744, Start Num: 11

Candidate Starts for PartyCup_3:

(Start: 11 @2568 has 40 MA's), (Start: 13 @2583 has 2 MA's), (17, 2619), (18, 2622), (24, 2670), (25, 2676),

Gene: PeteyPab_27 Start: 18906, Stop: 19094, Start Num: 9

Candidate Starts for PeteyPab_27:

(Start: 9 @18906 has 4 MA's), (Start: 13 @18927 has 2 MA's), (14, 18942), (21, 18993), (22, 18999), (26, 19023),

Gene: PotatoChip_28 Start: 18908, Stop: 19096, Start Num: 9

Candidate Starts for PotatoChip_28:

(Start: 9 @18908 has 4 MA's), (Start: 13 @18929 has 2 MA's), (14, 18944), (21, 18995), (22, 19001), (26, 19025),

Gene: Potatoes_3 Start: 2590, Stop: 2766, Start Num: 11

Candidate Starts for Potatoes_3:

(6, 2530), (Start: 11 @2590 has 40 MA's), (Start: 13 @2605 has 2 MA's), (24, 2692), (25, 2698),

Gene: RAP15_3 Start: 2596, Stop: 2772, Start Num: 11

Candidate Starts for RAP15_3:

(6, 2536), (Start: 11 @2596 has 40 MA's), (Start: 13 @2611 has 2 MA's), (24, 2698), (25, 2704),

Gene: RcigaStruga_3 Start: 2544, Stop: 2720, Start Num: 11

Candidate Starts for RcigaStruga_3:

(Start: 11 @2544 has 40 MA's), (Start: 13 @2559 has 2 MA's), (17, 2595), (25, 2652),

Gene: Riverdale_3 Start: 2527, Stop: 2703, Start Num: 11

Candidate Starts for Riverdale_3:

(Start: 11 @2527 has 40 MA's), (Start: 13 @2542 has 2 MA's), (24, 2629), (25, 2635),

Gene: Rozby_3 Start: 2527, Stop: 2703, Start Num: 11

Candidate Starts for Rozby_3:

(Start: 11 @2527 has 40 MA's), (Start: 13 @2542 has 2 MA's), (24, 2629), (25, 2635),

Gene: Savage2526_3 Start: 2590, Stop: 2766, Start Num: 11

Candidate Starts for Savage2526_3:

(6, 2530), (Start: 11 @2590 has 40 MA's), (Start: 13 @2605 has 2 MA's), (24, 2692), (25, 2698),

Gene: Scuttle_3 Start: 2596, Stop: 2772, Start Num: 11

Candidate Starts for Scuttle_3:

(6, 2536), (Start: 11 @2596 has 40 MA's), (Start: 13 @2611 has 2 MA's), (24, 2698), (25, 2704),

Gene: Spartan_23 Start: 23137, Stop: 23385, Start Num: 9

Candidate Starts for Spartan_23:

(Start: 9 @23137 has 4 MA's), (20, 23212), (23, 23245), (27, 23281), (29, 23299), (30, 23302),

Gene: Suppi_3 Start: 2583, Stop: 2744, Start Num: 13

Candidate Starts for Suppi_3:

(Start: 13 @2583 has 2 MA's), (17, 2619), (24, 2670), (25, 2676),

Gene: TailX7_16 Start: 11159, Stop: 11431, Start Num: 8

Candidate Starts for TailX7_16:

(8, 11159), (Start: 10 @11213 has 1 MA's), (30, 11369),

Gene: TattModd_3 Start: 2590, Stop: 2766, Start Num: 11

Candidate Starts for TattModd_3:

(6, 2530), (Start: 11 @2590 has 40 MA's), (Start: 13 @2605 has 2 MA's), (24, 2692), (25, 2698),

Gene: Vallejo_3 Start: 2527, Stop: 2703, Start Num: 11

Candidate Starts for Vallejo_3:

(Start: 11 @2527 has 40 MA's), (Start: 13 @2542 has 2 MA's), (24, 2629), (25, 2635),

Gene: Wawa_3 Start: 2566, Stop: 2742, Start Num: 11

Candidate Starts for Wawa_3:

(4, 2482), (6, 2506), (Start: 11 @2566 has 40 MA's), (Start: 13 @2581 has 2 MA's), (15, 2608), (24, 2668), (25, 2674),

Gene: Wayne_3 Start: 2614, Stop: 2790, Start Num: 11

Candidate Starts for Wayne_3:

(Start: 11 @2614 has 40 MA's), (Start: 13 @2629 has 2 MA's), (17, 2665), (24, 2716), (25, 2722),

Gene: Wheelbite_29 Start: 22807, Stop: 22986, Start Num: 11

Candidate Starts for Wheelbite_29:

(Start: 11 @22807 has 40 MA's), (12, 22813), (24, 22909),

Gene: Zion_28 Start: 18906, Stop: 19094, Start Num: 9

Candidate Starts for Zion_28:

(Start: 9 @18906 has 4 MA's), (Start: 13 @18927 has 2 MA's), (14, 18942), (21, 18993), (22, 18999),
(26, 19023),

Gene: Zorro_3 Start: 2545, Stop: 2721, Start Num: 11

Candidate Starts for Zorro_3:

(6, 2485), (Start: 11 @2545 has 40 MA's), (Start: 13 @2560 has 2 MA's), (18, 2599), (24, 2647), (25,
2653),