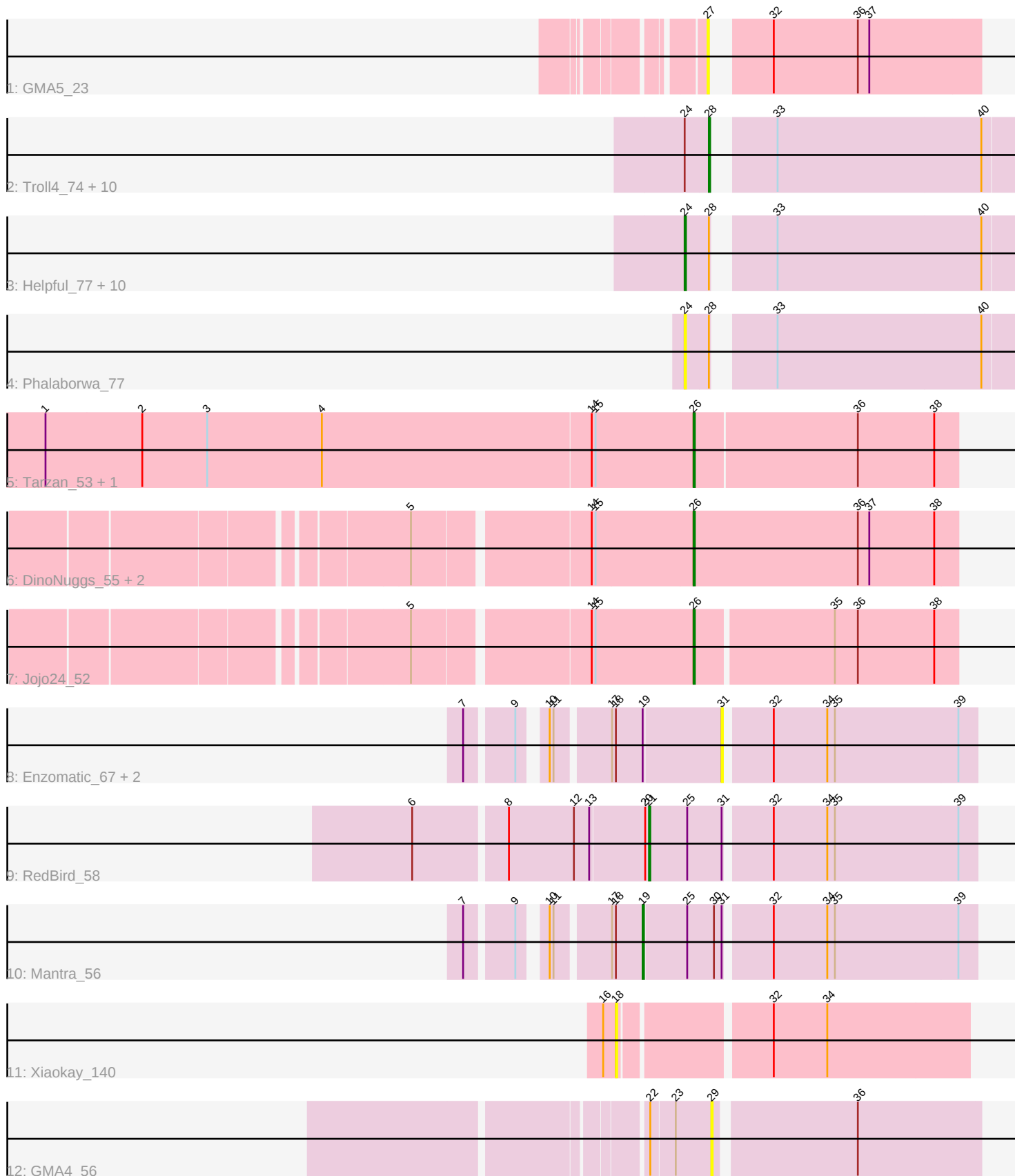


Pham 329231



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 329231 Report

This analysis was run 09/05/26 on database version 662.

Pham number 329231 has 37 members, 9 are drafts.

Phages represented in each track:

- Track 1 : GMA5_23
- Track 2 : Troll4_74, Giuseppe_76, BigMama_72, SirHarley_76, PBI1_70, Delton_74, Visconti_75, SuperheroCarly_74, Penelope2018_74, Gumball_74, KandZ_72
- Track 3 : Helpful_77, Erk16_74, Adjutor_72, Mopey_76, Thoth_74, Butterscotch_72, WaldoWhy_76, Chill_76, Prager_75, Nova_74, PLOT_74
- Track 4 : Phalaborwa_77
- Track 5 : Tarzan_53, DonkeyMan_53
- Track 6 : DinoNuggs_55, Reyja_55, DearBasketball_57
- Track 7 : Jojo24_52
- Track 8 : Enzomatic_67, SeaLumen_65, Polo2Bam_66
- Track 9 : RedBird_58
- Track 10 : Mantra_56
- Track 11 : Xiaokay_140
- Track 12 : GMA4_56

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

The start number called the most often in the published annotations is 28, it was called in 11 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BigMama_72, Delton_74, Giuseppe_76, Gumball_74, KandZ_72, PBI1_70, Penelope2018_74, SirHarley_76, SuperheroCarly_74, Troll4_74, Visconti_75,

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

- Adjutor_72, Butterscotch_72, Chill_76, Erk16_74, Helpful_77, Mopey_76, Nova_74, PLOT_74, Phalaborwa_77, Prager_75, Thoth_74, WaldoWhy_76,

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

- DearBasketball_57, DinoNuggs_55, DonkeyMan_53, Enzomatic_67, GMA4_56, GMA5_23, Jojo24_52, Mantra_56, Polo2Bam_66, RedBird_58, Reyja_55, SeaLumen_65, Tarzan_53, Xiaokay_140,

Summary by start number:

Start 18:

- Found in 5 of 37 (13.5%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Xiaokay_140 (J),

Start 19:

- Found in 4 of 37 (10.8%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Mantra_56 (F1),

Start 21:

- Found in 1 of 37 (2.7%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedBird_58 (F1),

Start 24:

- Found in 23 of 37 (62.2%) of genes in pham
- Manual Annotations of this start: 11 of 28
- Called 52.2% of time when present
- Phage (with cluster) where this start called: Adjutor_72 (D1), Butterscotch_72 (D1), Chill_76 (D1), Erk16_74 (D1), Helpful_77 (D1), Mopey_76 (D1), Nova_74 (D1), PLOT_74 (D1), Phalaborwa_77 (D1), Prager_75 (D1), Thoth_74 (D1), WaldoWhy_76 (D1),

Start 26:

- Found in 6 of 37 (16.2%) of genes in pham
- Manual Annotations of this start: 4 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DearBasketball_57 (DY), DinoNuggs_55 (DY), DonkeyMan_53 (DY), Jojo24_52 (DY), Reyja_55 (DY), Tarzan_53 (DY),

Start 27:

- Found in 1 of 37 (2.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA5_23 (CW2),

Start 28:

- Found in 23 of 37 (62.2%) of genes in pham
- Manual Annotations of this start: 11 of 28
- Called 47.8% of time when present
- Phage (with cluster) where this start called: BigMama_72 (D1), Delton_74 (D1), Giuseppe_76 (D1), Gumball_74 (D1), KandZ_72 (D1), PBI1_70 (D1), Penelope2018_74 (D1), SirHarley_76 (D1), SuperheroCarly_74 (D1), Troll4_74 (D1), Visconti_75 (D1),

Start 29:

- Found in 1 of 37 (2.7%) of genes in pham
- No Manual Annotations of this start.

- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA4_56 (singleton),

Start 31:

- Found in 5 of 37 (13.5%) of genes in pham
- No Manual Annotations of this start.
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Enzomatic_67 (F1), Polo2Bam_66 (F1), SeaLumen_65 (F1),

Summary by clusters:

There are 6 clusters represented in this pham: F1, singleton, J, CW2, DY, D1,

Info for manual annotations of cluster D1:

- Start number 24 was manually annotated 11 times for cluster D1.
- Start number 28 was manually annotated 11 times for cluster D1.

Info for manual annotations of cluster DY:

- Start number 26 was manually annotated 4 times for cluster DY.

Info for manual annotations of cluster F1:

- Start number 19 was manually annotated 1 time for cluster F1.
- Start number 21 was manually annotated 1 time for cluster F1.

Gene Information:

Gene: Adjutor_72 Start: 56286, Stop: 56537, Start Num: 24

Candidate Starts for Adjutor_72:

(Start: 24 @56286 has 11 MA's), (Start: 28 @56304 has 11 MA's), (33, 56340), (40, 56499),

Gene: BigMama_72 Start: 56377, Stop: 56610, Start Num: 28

Candidate Starts for BigMama_72:

(Start: 24 @56359 has 11 MA's), (Start: 28 @56377 has 11 MA's), (33, 56413), (40, 56572),

Gene: Butterscotch_72 Start: 56337, Stop: 56588, Start Num: 24

Candidate Starts for Butterscotch_72:

(Start: 24 @56337 has 11 MA's), (Start: 28 @56355 has 11 MA's), (33, 56391), (40, 56550),

Gene: Chill_76 Start: 56314, Stop: 56565, Start Num: 24

Candidate Starts for Chill_76:

(Start: 24 @56314 has 11 MA's), (Start: 28 @56332 has 11 MA's), (33, 56368), (40, 56527),

Gene: DearBasketball_57 Start: 35676, Stop: 35882, Start Num: 26

Candidate Starts for DearBasketball_57:

(5, 35469), (14, 35598), (15, 35601), (Start: 26 @35676 has 4 MA's), (36, 35805), (37, 35814), (38, 35865),

Gene: Delton_74 Start: 56753, Stop: 56986, Start Num: 28

Candidate Starts for Delton_74:

(Start: 24 @56735 has 11 MA's), (Start: 28 @56753 has 11 MA's), (33, 56789), (40, 56948),

Gene: DinoNuggs_55 Start: 35345, Stop: 35551, Start Num: 26

Candidate Starts for DinoNuggs_55:

(5, 35138), (14, 35267), (15, 35270), (Start: 26 @35345 has 4 MA's), (36, 35474), (37, 35483), (38, 35534),

Gene: DonkeyMan_53 Start: 34757, Stop: 34960, Start Num: 26

Candidate Starts for DonkeyMan_53:

(1, 34253), (2, 34328), (3, 34379), (4, 34469), (14, 34679), (15, 34682), (Start: 26 @34757 has 4 MA's), (36, 34883), (38, 34943),

Gene: Enzomatic_67 Start: 40234, Stop: 40425, Start Num: 31

Candidate Starts for Enzomatic_67:

(7, 40060), (9, 40093), (10, 40108), (11, 40111), (17, 40150), (18, 40153), (Start: 19 @40174 has 1 MA's), (31, 40234), (32, 40267), (34, 40309), (35, 40315), (39, 40411),

Gene: Erk16_74 Start: 56392, Stop: 56643, Start Num: 24

Candidate Starts for Erk16_74:

(Start: 24 @56392 has 11 MA's), (Start: 28 @56410 has 11 MA's), (33, 56446), (40, 56605),

Gene: GMA4_56 Start: 35967, Stop: 36167, Start Num: 29

Candidate Starts for GMA4_56:

(22, 35922), (23, 35940), (29, 35967), (36, 36072),

Gene: GMA5_23 Start: 15324, Stop: 15518, Start Num: 27

Candidate Starts for GMA5_23:

(27, 15324), (32, 15357), (36, 15423), (37, 15432),

Gene: Giuseppe_76 Start: 56282, Stop: 56515, Start Num: 28

Candidate Starts for Giuseppe_76:

(Start: 24 @56264 has 11 MA's), (Start: 28 @56282 has 11 MA's), (33, 56318), (40, 56477),

Gene: Gumball_74 Start: 56755, Stop: 56988, Start Num: 28

Candidate Starts for Gumball_74:

(Start: 24 @56737 has 11 MA's), (Start: 28 @56755 has 11 MA's), (33, 56791), (40, 56950),

Gene: Helpful_77 Start: 56652, Stop: 56903, Start Num: 24

Candidate Starts for Helpful_77:

(Start: 24 @56652 has 11 MA's), (Start: 28 @56670 has 11 MA's), (33, 56706), (40, 56865),

Gene: Jojo24_52 Start: 34059, Stop: 34259, Start Num: 26

Candidate Starts for Jojo24_52:

(5, 33852), (14, 33981), (15, 33984), (Start: 26 @34059 has 4 MA's), (35, 34164), (36, 34182), (38, 34242),

Gene: KandZ_72 Start: 56499, Stop: 56780, Start Num: 28

Candidate Starts for KandZ_72:

(Start: 24 @56481 has 11 MA's), (Start: 28 @56499 has 11 MA's), (33, 56535), (40, 56694),

Gene: Mantra_56 Start: 39272, Stop: 39523, Start Num: 19

Candidate Starts for Mantra_56:

(7, 39158), (9, 39191), (10, 39206), (11, 39209), (17, 39248), (18, 39251), (Start: 19 @39272 has 1 MA's), (25, 39305), (30, 39326), (31, 39332), (32, 39365), (34, 39407), (35, 39413), (39, 39509),

Gene: Mopey_76 Start: 56290, Stop: 56541, Start Num: 24

Candidate Starts for Mopey_76:

(Start: 24 @56290 has 11 MA's), (Start: 28 @56308 has 11 MA's), (33, 56344), (40, 56503),

Gene: Nova_74 Start: 56760, Stop: 57011, Start Num: 24

Candidate Starts for Nova_74:

(Start: 24 @56760 has 11 MA's), (Start: 28 @56778 has 11 MA's), (33, 56814), (40, 56973),

Gene: PBI1_70 Start: 56286, Stop: 56519, Start Num: 28

Candidate Starts for PBI1_70:

(Start: 24 @56268 has 11 MA's), (Start: 28 @56286 has 11 MA's), (33, 56322), (40, 56481),

Gene: PLOT_74 Start: 56290, Stop: 56541, Start Num: 24

Candidate Starts for PLOT_74:

(Start: 24 @56290 has 11 MA's), (Start: 28 @56308 has 11 MA's), (33, 56344), (40, 56503),

Gene: Penelope2018_74 Start: 56342, Stop: 56575, Start Num: 28

Candidate Starts for Penelope2018_74:

(Start: 24 @56324 has 11 MA's), (Start: 28 @56342 has 11 MA's), (33, 56378), (40, 56537),

Gene: Phalaborwa_77 Start: 56917, Stop: 57168, Start Num: 24

Candidate Starts for Phalaborwa_77:

(Start: 24 @56917 has 11 MA's), (Start: 28 @56935 has 11 MA's), (33, 56971), (40, 57130),

Gene: Polo2Bam_66 Start: 40234, Stop: 40425, Start Num: 31

Candidate Starts for Polo2Bam_66:

(7, 40060), (9, 40093), (10, 40108), (11, 40111), (17, 40150), (18, 40153), (Start: 19 @40174 has 1 MA's), (31, 40234), (32, 40267), (34, 40309), (35, 40315), (39, 40411),

Gene: Prager_75 Start: 56384, Stop: 56635, Start Num: 24

Candidate Starts for Prager_75:

(Start: 24 @56384 has 11 MA's), (Start: 28 @56402 has 11 MA's), (33, 56438), (40, 56597),

Gene: RedBird_58 Start: 39602, Stop: 39850, Start Num: 21

Candidate Starts for RedBird_58:

(6, 39425), (8, 39494), (12, 39545), (13, 39557), (20, 39599), (Start: 21 @39602 has 1 MA's), (25, 39632), (31, 39659), (32, 39692), (34, 39734), (35, 39740), (39, 39836),

Gene: Reyja_55 Start: 35345, Stop: 35551, Start Num: 26

Candidate Starts for Reyja_55:

(5, 35138), (14, 35267), (15, 35270), (Start: 26 @35345 has 4 MA's), (36, 35474), (37, 35483), (38, 35534),

Gene: SeaLumen_65 Start: 40234, Stop: 40425, Start Num: 31

Candidate Starts for SeaLumen_65:

(7, 40060), (9, 40093), (10, 40108), (11, 40111), (17, 40150), (18, 40153), (Start: 19 @40174 has 1 MA's), (31, 40234), (32, 40267), (34, 40309), (35, 40315), (39, 40411),

Gene: SirHarley_76 Start: 56738, Stop: 56971, Start Num: 28

Candidate Starts for SirHarley_76:

(Start: 24 @56720 has 11 MA's), (Start: 28 @56738 has 11 MA's), (33, 56774), (40, 56933),

Gene: SuperheroCarly_74 Start: 56490, Stop: 56723, Start Num: 28

Candidate Starts for SuperheroCarly_74:

(Start: 24 @56472 has 11 MA's), (Start: 28 @56490 has 11 MA's), (33, 56526), (40, 56685),

Gene: Tarzan_53 Start: 34012, Stop: 34215, Start Num: 26

Candidate Starts for Tarzan_53:

(1, 33508), (2, 33583), (3, 33634), (4, 33724), (14, 33934), (15, 33937), (Start: 26 @34012 has 4 MA's), (36, 34138), (38, 34198),

Gene: Thoth_74 Start: 56378, Stop: 56629, Start Num: 24

Candidate Starts for Thoth_74:

(Start: 24 @56378 has 11 MA's), (Start: 28 @56396 has 11 MA's), (33, 56432), (40, 56591),

Gene: Troll4_74 Start: 56464, Stop: 56697, Start Num: 28

Candidate Starts for Troll4_74:

(Start: 24 @56446 has 11 MA's), (Start: 28 @56464 has 11 MA's), (33, 56500), (40, 56659),

Gene: Visconti_75 Start: 56372, Stop: 56605, Start Num: 28

Candidate Starts for Visconti_75:

(Start: 24 @56354 has 11 MA's), (Start: 28 @56372 has 11 MA's), (33, 56408), (40, 56567),

Gene: WaldoWhy_76 Start: 56314, Stop: 56565, Start Num: 24

Candidate Starts for WaldoWhy_76:

(Start: 24 @56314 has 11 MA's), (Start: 28 @56332 has 11 MA's), (33, 56368), (40, 56527),

Gene: Xiaokay_140 Start: 76894, Stop: 77154, Start Num: 18

Candidate Starts for Xiaokay_140:

(16, 76885), (18, 76894), (32, 77002), (34, 77044),