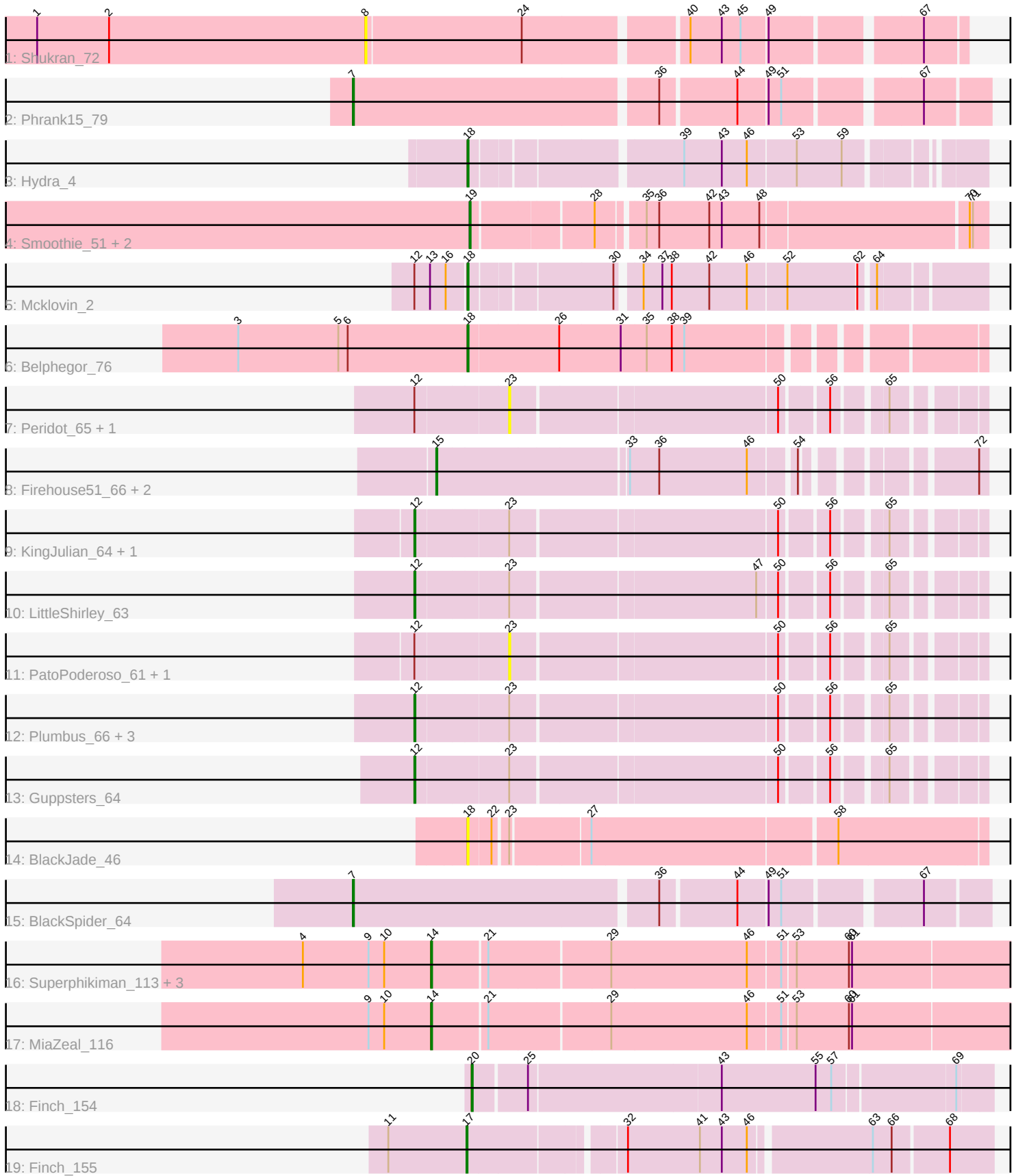


Pham 278360



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 278360 Report

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

Pham number 278360 has 32 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Shukran_72
- Track 2 : Phrank15_79
- Track 3 : Hydra_4
- Track 4 : Smoothie_51, Engineer_51, Lozinak_50
- Track 5 : Mcklovin_2
- Track 6 : Belphegor_76
- Track 7 : Peridot_65, Ms6_60
- Track 8 : Firehouse51_66, EleanorGeorge_65, Mutaforma13_69
- Track 9 : KingJulian_64, Byougenkin_63
- Track 10 : LittleShirley_63
- Track 11 : PatoPoderoso_61, Corium_61
- Track 12 : Plumbus_66, Slim_65, Emmaloid_65, Totinger_63
- Track 13 : Guppsters_64
- Track 14 : BlackJade_46
- Track 15 : BlackSpider_64
- Track 16 : Superphikiman_113, Courthouse_111, Squint_114, Ariel_116
- Track 17 : MiaZeal_116
- Track 18 : Finch_154
- Track 19 : Finch_155

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

The start number called the most often in the published annotations is 12, it was called in 8 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Byougenkin_63, Emmaloid_65, Guppsters_64, KingJulian_64, LittleShirley_63, Plumbus_66, Slim_65, Totinger_63,

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

- Corium_61, Mcklovin_2, Ms6_60, PatoPoderoso_61, Peridot_65,

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

• Ariel_116, Belphegor_76, BlackJade_46, BlackSpider_64, Courthouse_111, EleanorGeorge_65, Engineer_51, Finch_154, Finch_155, Firehouse51_66, Hydra_4, Lozinak_50, MiaZeal_116, Mutaforma13_69, Phrank15_79, Shukran_72, Smoothie_51, Squint_114, Superphikiman_113,

Summary by start number:

Start 7:

- Found in 2 of 32 (6.2%) of genes in pham
- Manual Annotations of this start: 2 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlackSpider_64 (FN), Phrank15_79 (AY),

Start 8:

- Found in 1 of 32 (3.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shukran_72 (AY),

Start 12:

- Found in 13 of 32 (40.6%) of genes in pham
- Manual Annotations of this start: 8 of 26
- Called 61.5% of time when present
- Phage (with cluster) where this start called: Byougenkin_63 (F1), Emmaloid_65 (F1), Guppsters_64 (F1), KingJulian_64 (F1), LittleShirley_63 (F1), Plumbus_66 (F1), Slim_65 (F1), Totinger_63 (F1),

Start 14:

- Found in 5 of 32 (15.6%) of genes in pham
- Manual Annotations of this start: 5 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel_116 (J), Courthouse_111 (J), MiaZeal_116 (J), Squint_114 (J), Superphikiman_113 (J),

Start 15:

- Found in 3 of 32 (9.4%) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EleanorGeorge_65 (F1), Firehouse51_66 (F1), Mutaforma13_69 (F1),

Start 17:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch_155 (singleton),

Start 18:

- Found in 4 of 32 (12.5%) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Belphegor_76 (DE2), BlackJade_46 (FL), Hydra_4 (BD1), Mcklovin_2 (CZ4),

Start 19:

- Found in 3 of 32 (9.4%) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Engineer_51 (CQ1), Lozinak_50 (CQ1), Smoothie_51 (CQ1),

Start 20:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch_154 (singleton),

Start 23:

- Found in 13 of 32 (40.6%) of genes in pham
- No Manual Annotations of this start.
- Called 30.8% of time when present
- Phage (with cluster) where this start called: Corium_61 (F1), Ms6_60 (F1), PatoPoderoso_61 (F1), Peridot_65 (F1),

Summary by clusters:

There are 10 clusters represented in this pham: F1, singleton, DE2, J, CZ4, BD1, AY, CQ1, FL, FN,

Info for manual annotations of cluster AY:

- Start number 7 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster BD1:

- Start number 18 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster CQ1:

- Start number 19 was manually annotated 3 times for cluster CQ1.

Info for manual annotations of cluster CZ4:

- Start number 18 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DE2:

- Start number 18 was manually annotated 1 time for cluster DE2.

Info for manual annotations of cluster F1:

- Start number 12 was manually annotated 8 times for cluster F1.
- Start number 15 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster FN:

- Start number 7 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster J:

- Start number 14 was manually annotated 5 times for cluster J.

Gene Information:

Gene: Ariel_116 Start: 62922, Stop: 63554, Start Num: 14

Candidate Starts for Ariel_116:

(4, 62799), (9, 62862), (10, 62877), (Start: 14 @62922 has 5 MA's), (21, 62973), (29, 63084), (46, 63213), (51, 63243), (53, 63255), (60, 63303), (61, 63306),

Gene: Belphegor_76 Start: 56290, Stop: 56739, Start Num: 18

Candidate Starts for Belphegor_76:

(3, 56071), (5, 56167), (6, 56176), (Start: 18 @56290 has 3 MA's), (26, 56374), (31, 56431), (35, 56455), (38, 56479), (39, 56491),

Gene: BlackJade_46 Start: 31841, Stop: 32305, Start Num: 18

Candidate Starts for BlackJade_46:

(Start: 18 @31841 has 3 MA's), (22, 31862), (23, 31874), (27, 31943), (58, 32168),

Gene: BlackSpider_64 Start: 38978, Stop: 39544, Start Num: 7

Candidate Starts for BlackSpider_64:

(Start: 7 @38978 has 2 MA's), (36, 39260), (44, 39329), (49, 39356), (51, 39368), (67, 39485),

Gene: Byougenkin_63 Start: 41134, Stop: 41616, Start Num: 12

Candidate Starts for Byougenkin_63:

(Start: 12 @41134 has 8 MA's), (23, 41218), (50, 41461), (56, 41500), (65, 41542),

Gene: Corium_61 Start: 40510, Stop: 40908, Start Num: 23

Candidate Starts for Corium_61:

(Start: 12 @40426 has 8 MA's), (23, 40510), (50, 40753), (56, 40792), (65, 40834),

Gene: Courthouse_111 Start: 62522, Stop: 63154, Start Num: 14

Candidate Starts for Courthouse_111:

(4, 62399), (9, 62462), (10, 62477), (Start: 14 @62522 has 5 MA's), (21, 62573), (29, 62684), (46, 62813), (51, 62843), (53, 62855), (60, 62903), (61, 62906),

Gene: EleanorGeorge_65 Start: 42284, Stop: 42745, Start Num: 15

Candidate Starts for EleanorGeorge_65:

(Start: 15 @42284 has 3 MA's), (33, 42458), (36, 42485), (46, 42569), (54, 42608), (72, 42737),

Gene: Emmaloid_65 Start: 42008, Stop: 42490, Start Num: 12

Candidate Starts for Emmaloid_65:

(Start: 12 @42008 has 8 MA's), (23, 42092), (50, 42335), (56, 42374), (65, 42416),

Gene: Engineer_51 Start: 31923, Stop: 32384, Start Num: 19

Candidate Starts for Engineer_51:

(Start: 19 @31923 has 3 MA's), (28, 32031), (35, 32070), (36, 32082), (42, 32130), (43, 32142), (48, 32178), (70, 32367), (71, 32370),

Gene: Finch_154 Start: 99144, Stop: 99620, Start Num: 20

Candidate Starts for Finch_154:

(Start: 20 @99144 has 1 MA's), (25, 99192), (43, 99372), (55, 99462), (57, 99477), (69, 99588),

Gene: Finch_155 Start: 99620, Stop: 100087, Start Num: 17

Candidate Starts for Finch_155:

(11, 99545), (Start: 17 @99620 has 1 MA's), (32, 99755), (41, 99824), (43, 99845), (46, 99869), (63, 99977), (66, 99995), (68, 100046),

Gene: Firehouse51_66 Start: 45330, Stop: 45791, Start Num: 15

Candidate Starts for Firehouse51_66:

(Start: 15 @45330 has 3 MA's), (33, 45504), (36, 45531), (46, 45615), (54, 45654), (72, 45783),

Gene: Guppsters_64 Start: 40923, Stop: 41405, Start Num: 12

Candidate Starts for Guppsters_64:

(Start: 12 @40923 has 8 MA's), (23, 41007), (50, 41250), (56, 41289), (65, 41331),

Gene: Hydra_4 Start: 1342, Stop: 1785, Start Num: 18

Candidate Starts for Hydra_4:

(Start: 18 @1342 has 3 MA's), (39, 1525), (43, 1561), (46, 1585), (53, 1630), (59, 1672),

Gene: KingJulian_64 Start: 40426, Stop: 40908, Start Num: 12

Candidate Starts for KingJulian_64:

(Start: 12 @40426 has 8 MA's), (23, 40510), (50, 40753), (56, 40792), (65, 40834),

Gene: LittleShirley_63 Start: 41739, Stop: 42221, Start Num: 12

Candidate Starts for LittleShirley_63:

(Start: 12 @41739 has 8 MA's), (23, 41823), (47, 42048), (50, 42066), (56, 42105), (65, 42147),

Gene: Lozinak_50 Start: 31978, Stop: 32439, Start Num: 19

Candidate Starts for Lozinak_50:

(Start: 19 @31978 has 3 MA's), (28, 32086), (35, 32125), (36, 32137), (42, 32185), (43, 32197), (48, 32233), (70, 32422), (71, 32425),

Gene: Mcklovin_2 Start: 532, Stop: 981, Start Num: 18

Candidate Starts for Mcklovin_2:

(Start: 12 @484 has 8 MA's), (13, 499), (16, 514), (Start: 18 @532 has 3 MA's), (30, 658), (34, 676), (37, 694), (38, 703), (42, 739), (46, 775), (52, 811), (62, 874), (64, 886),

Gene: MiaZeal_116 Start: 63594, Stop: 64151, Start Num: 14

Candidate Starts for MiaZeal_116:

(9, 63534), (10, 63549), (Start: 14 @63594 has 5 MA's), (21, 63645), (29, 63756), (46, 63885), (51, 63915), (53, 63927), (60, 63975), (61, 63978),

Gene: Ms6_60 Start: 36767, Stop: 37165, Start Num: 23

Candidate Starts for Ms6_60:

(Start: 12 @36683 has 8 MA's), (23, 36767), (50, 37010), (56, 37049), (65, 37091),

Gene: Mutaforma13_69 Start: 44640, Stop: 45101, Start Num: 15

Candidate Starts for Mutaforma13_69:

(Start: 15 @44640 has 3 MA's), (33, 44814), (36, 44841), (46, 44925), (54, 44964), (72, 45093),

Gene: PatoPoderoso_61 Start: 40510, Stop: 40908, Start Num: 23

Candidate Starts for PatoPoderoso_61:

(Start: 12 @40426 has 8 MA's), (23, 40510), (50, 40753), (56, 40792), (65, 40834),

Gene: Peridot_65 Start: 40742, Stop: 41140, Start Num: 23

Candidate Starts for Peridot_65:

(Start: 12 @40658 has 8 MA's), (23, 40742), (50, 40985), (56, 41024), (65, 41066),

Gene: Phrank15_79 Start: 42147, Stop: 42713, Start Num: 7

Candidate Starts for Phrank15_79:

(Start: 7 @42147 has 2 MA's), (36, 42429), (44, 42498), (49, 42525), (51, 42537), (67, 42654),

Gene: Plumbus_66 Start: 41519, Stop: 42001, Start Num: 12

Candidate Starts for Plumbus_66:

(Start: 12 @41519 has 8 MA's), (23, 41603), (50, 41846), (56, 41885), (65, 41927),

Gene: Shukran_72 Start: 40696, Stop: 41226, Start Num: 8

Candidate Starts for Shukran_72:

(1, 40381), (2, 40450), (8, 40696), (24, 40843), (40, 40987), (43, 41017), (45, 41035), (49, 41059), (67, 41188),

Gene: Slim_65 Start: 41999, Stop: 42481, Start Num: 12

Candidate Starts for Slim_65:

(Start: 12 @41999 has 8 MA's), (23, 42083), (50, 42326), (56, 42365), (65, 42407),

Gene: Smoothie_51 Start: 31978, Stop: 32439, Start Num: 19

Candidate Starts for Smoothie_51:

(Start: 19 @31978 has 3 MA's), (28, 32086), (35, 32125), (36, 32137), (42, 32185), (43, 32197), (48, 32233), (70, 32422), (71, 32425),

Gene: Squint_114 Start: 63713, Stop: 64345, Start Num: 14

Candidate Starts for Squint_114:

(4, 63590), (9, 63653), (10, 63668), (Start: 14 @63713 has 5 MA's), (21, 63764), (29, 63875), (46, 64004), (51, 64034), (53, 64046), (60, 64094), (61, 64097),

Gene: Superphikiman_113 Start: 62804, Stop: 63436, Start Num: 14

Candidate Starts for Superphikiman_113:

(4, 62681), (9, 62744), (10, 62759), (Start: 14 @62804 has 5 MA's), (21, 62855), (29, 62966), (46, 63095), (51, 63125), (53, 63137), (60, 63185), (61, 63188),

Gene: Totinger_63 Start: 40465, Stop: 40947, Start Num: 12

Candidate Starts for Totinger_63:

(Start: 12 @40465 has 8 MA's), (23, 40549), (50, 40792), (56, 40831), (65, 40873),