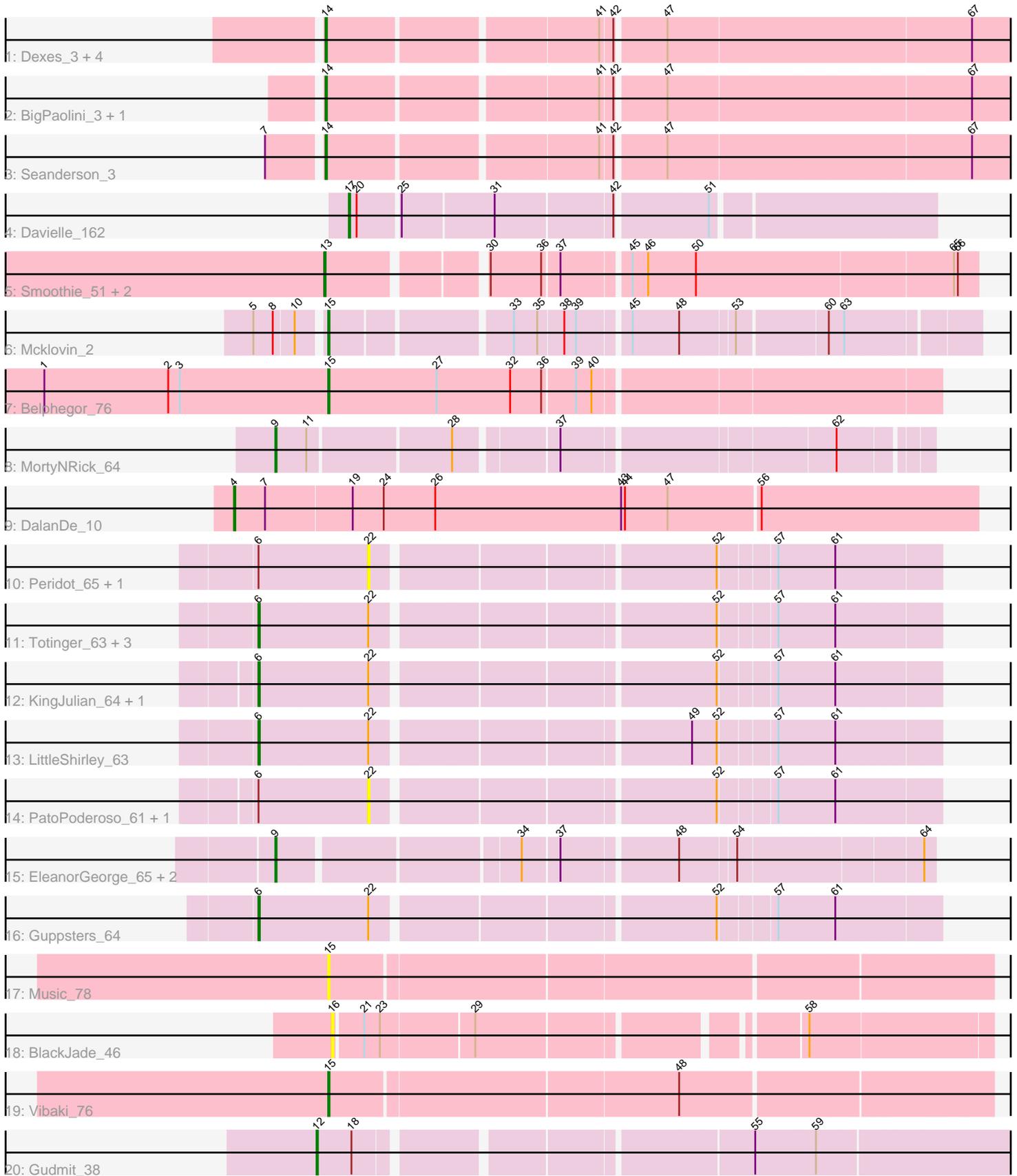# Pham 291363

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 291363 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291363 has 35 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Dexes_3, Whitspit_3, Gyzlar_3, Smairt_2, Smeagol_2
• Track 2 : BigPaolini_3, Licorice_4
• Track 3 : Seanderson_3
• Track 4 : Davielle_162
• Track 5 : Smoothie_51, Engineer_51, Lozinak_50
• Track 6 : Mcklovin_2
• Track 7 : Belphegor_76
• Track 8 : MortyNRick_64
• Track 9 : DalanDe_10
• Track 10 : Peridot_65, Ms6_60
• Track 11 : Totinger_63, Plumbus_66, Slim_65, Emmaloid_65
• Track 12 : KingJulian_64, Byougenkin_63
• Track 13 : LittleShirley_63
• Track 14 : PatoPoderoso_61, Corium_61
• Track 15 : EleanorGeorge_65, Mutaforma13_69, Firehouse51_66
• Track 16 : Guppsters_64
• Track 17 : Music_78
• Track 18 : BlackJade_46
• Track 19 : Vibaki_76
• Track 20 : Gudmit_38

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

The start number called the most often in the published annotations is 6, it was called in 8 of the 28 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, Ms6_60, PatoPoderoso_61, Peridot_65,

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

• Belphegor_76, BigPaolini_3, BlackJade_46, DalanDe_10, Davielle_162, Dexes_3, EleanorGeorge_65, Engineer_51, Firehouse51_66, Gudmit_38, Gyzlar_3, Licorice_4, Lozinak_50, Mcklovin_2, MortyNRick_64, Music_78, Mutaforma13_69, Seanderson_3, Smairt_2, Smeagol_2, Smoothie_51, Vibaki_76, Whitspit_3,

Summary by start number:

Start 4:
• Found in 1 of 35 (2.9%) 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: DalanDe_10 (DQ),

Start 6:
• Found in 12 of 35 (34.3%) of genes in pham
• Manual Annotations of this start: 8 of 28
• Called 66.7% 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 9:
• Found in 4 of 35 (11.4%) 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: EleanorGeorge_65 (F1), Firehouse51_66 (F1), MortyNRick_64 (DN), Mutaforma13_69 (F1),

Start 12:
• Found in 1 of 35 (2.9%) 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: Gudmit_38 (singleton),

Start 13:
• Found in 3 of 35 (8.6%) of genes in pham
• Manual Annotations of this start: 3 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Engineer_51 (CQ1), Lozinak_50 (CQ1), Smoothie_51 (CQ1),

Start 14:
• Found in 8 of 35 (22.9%) of genes in pham
• Manual Annotations of this start: 7 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BigPaolini_3 (A1), Dexes_3 (A1), Gyzlar_3 (A1), Licorice_4 (A1), Seanderson_3 (A1), Smairt_2 (A1), Smeagol_2 (A1), Whitspit_3 (A1),

Start 15:
• Found in 4 of 35 (11.4%) of genes in pham
• Manual Annotations of this start: 3 of 28
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Belphegor_76 (DE2), Mcklovin_2 (CZ4), Music_78 (FL), Vibaki_76 (FL),

Start 16:
• Found in 1 of 35 (2.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlackJade_46 (FL),

Start 17:
• Found in 1 of 35 (2.9%) 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: Davielle_162 (BE1),

Start 22:
• Found in 12 of 35 (34.3%) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% 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: DN, F1, singleton, DE2, CZ4, A1, CQ1, BE1, FL, DQ,

Info for manual annotations of cluster A1:
•Start number 14 was manually annotated 7 times for cluster A1.

Info for manual annotations of cluster BE1:
•Start number 17 was manually annotated 1 time for cluster BE1.

Info for manual annotations of cluster CQ1:
•Start number 13 was manually annotated 3 times for cluster CQ1.

Info for manual annotations of cluster CZ4:
•Start number 15 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DE2:
•Start number 15 was manually annotated 1 time for cluster DE2.

Info for manual annotations of cluster DN:
•Start number 9 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DQ:
•Start number 4 was manually annotated 1 time for cluster DQ.

Info for manual annotations of cluster F1:
•Start number 6 was manually annotated 8 times for cluster F1.
•Start number 9 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster FL:

•Start number 15 was manually annotated 1 time for cluster FL.

Gene Information:
Gene: Belphegor_76 Start: 56290, Stop: 56739, Start Num: 15
Candidate Starts for Belphegor_76:
(1, 56071), (2, 56167), (3, 56176), (Start: 15 @56290 has 3 MA's), (27, 56374), (32, 56431), (36, 56455), (39, 56479), (40, 56491),

Gene: BigPaolini_3 Start: 1128, Stop: 1637, Start Num: 14
Candidate Starts for BigPaolini_3:
(Start: 14 @1128 has 7 MA's), (41, 1323), (42, 1332), (47, 1368), (67, 1590),

Gene: BlackJade_46 Start: 31841, Stop: 32305, Start Num: 16
Candidate Starts for BlackJade_46:
(16, 31841), (21, 31862), (23, 31874), (29, 31943), (58, 32168),

Gene: Byougenkin_63 Start: 41134, Stop: 41616, Start Num: 6
Candidate Starts for Byougenkin_63:
(Start: 6 @41134 has 8 MA's), (22, 41218), (52, 41461), (57, 41500), (61, 41542),

Gene: Corium_61 Start: 40510, Stop: 40908, Start Num: 22
Candidate Starts for Corium_61:
(Start: 6 @40426 has 8 MA's), (22, 40510), (52, 40753), (57, 40792), (61, 40834),

Gene: DalanDe_10 Start: 6059, Stop: 6628, Start Num: 4
Candidate Starts for DalanDe_10:
(Start: 4 @6059 has 1 MA's), (7, 6083), (19, 6149), (24, 6173), (26, 6212), (43, 6356), (44, 6359), (47, 6392), (56, 6461),

Gene: Davielle_162 Start: 91589, Stop: 92011, Start Num: 17
Candidate Starts for Davielle_162:
(Start: 17 @91589 has 1 MA's), (20, 91595), (25, 91625), (31, 91694), (42, 91781), (51, 91847),

Gene: Dexes_3 Start: 1113, Stop: 1622, Start Num: 14
Candidate Starts for Dexes_3:
(Start: 14 @1113 has 7 MA's), (41, 1308), (42, 1317), (47, 1353), (67, 1575),

Gene: EleanorGeorge_65 Start: 42284, Stop: 42745, Start Num: 9
Candidate Starts for EleanorGeorge_65:
(Start: 9 @42284 has 4 MA's), (34, 42458), (37, 42485), (48, 42569), (54, 42608), (64, 42737),

Gene: Emmaloid_65 Start: 42008, Stop: 42490, Start Num: 6
Candidate Starts for Emmaloid_65:
(Start: 6 @42008 has 8 MA's), (22, 42092), (52, 42335), (57, 42374), (61, 42416),

Gene: Engineer_51 Start: 31923, Stop: 32384, Start Num: 13
Candidate Starts for Engineer_51:
(Start: 13 @31923 has 3 MA's), (30, 32031), (36, 32070), (37, 32082), (45, 32130), (46, 32142), (50, 32178), (65, 32367), (66, 32370),

Gene: Firehouse51_66 Start: 45330, Stop: 45791, Start Num: 9
Candidate Starts for Firehouse51_66:
(Start: 9 @45330 has 4 MA's), (34, 45504), (37, 45531), (48, 45615), (54, 45654), (64, 45783),

Gene: Gudmit_38 Start: 27363, Stop: 27896, Start Num: 12
Candidate Starts for Gudmit_38:
(Start: 12 @27363 has 1 MA's), (18, 27390), (55, 27666), (59, 27711),

Gene: Guppsters_64 Start: 40923, Stop: 41405, Start Num: 6
Candidate Starts for Guppsters_64:
(Start: 6 @40923 has 8 MA's), (22, 41007), (52, 41250), (57, 41289), (61, 41331),

Gene: Gyzlar_3 Start: 1073, Stop: 1582, Start Num: 14
Candidate Starts for Gyzlar_3:
(Start: 14 @1073 has 7 MA's), (41, 1268), (42, 1277), (47, 1313), (67, 1535),

Gene: KingJulian_64 Start: 40426, Stop: 40908, Start Num: 6
Candidate Starts for KingJulian_64:
(Start: 6 @40426 has 8 MA's), (22, 40510), (52, 40753), (57, 40792), (61, 40834),

Gene: Licorice_4 Start: 1283, Stop: 1792, Start Num: 14
Candidate Starts for Licorice_4:
(Start: 14 @1283 has 7 MA's), (41, 1478), (42, 1487), (47, 1523), (67, 1745),

Gene: LittleShirley_63 Start: 41739, Stop: 42221, Start Num: 6
Candidate Starts for LittleShirley_63:
(Start: 6 @41739 has 8 MA's), (22, 41823), (49, 42048), (52, 42066), (57, 42105), (61, 42147),

Gene: Lozinak_50 Start: 31978, Stop: 32439, Start Num: 13
Candidate Starts for Lozinak_50:
(Start: 13 @31978 has 3 MA's), (30, 32086), (36, 32125), (37, 32137), (45, 32185), (46, 32197), (50, 32233), (65, 32422), (66, 32425),

Gene: Mcklovin_2 Start: 532, Stop: 981, Start Num: 15
Candidate Starts for Mcklovin_2:
(5, 484), (8, 499), (10, 514), (Start: 15 @532 has 3 MA's), (33, 658), (35, 676), (38, 694), (39, 703), (45, 739), (48, 775), (53, 811), (60, 874), (63, 886),

Gene: MortyNRick_64 Start: 42082, Stop: 42537, Start Num: 9
Candidate Starts for MortyNRick_64:
(Start: 9 @42082 has 4 MA's), (11, 42106), (28, 42211), (37, 42283), (62, 42475),

Gene: Ms6_60 Start: 36767, Stop: 37165, Start Num: 22
Candidate Starts for Ms6_60:
(Start: 6 @36683 has 8 MA's), (22, 36767), (52, 37010), (57, 37049), (61, 37091),

Gene: Music_78 Start: 47190, Stop: 47681, Start Num: 15
Candidate Starts for Music_78:
(Start: 15 @47190 has 3 MA's),

Gene: Mutaforma13_69 Start: 44640, Stop: 45101, Start Num: 9
Candidate Starts for Mutaforma13_69:
(Start: 9 @44640 has 4 MA's), (34, 44814), (37, 44841), (48, 44925), (54, 44964), (64, 45093),

Gene: PatoPoderoso_61 Start: 40510, Stop: 40908, Start Num: 22
Candidate Starts for PatoPoderoso_61:
(Start: 6 @40426 has 8 MA's), (22, 40510), (52, 40753), (57, 40792), (61, 40834),

Gene: Peridot_65 Start: 40742, Stop: 41140, Start Num: 22
Candidate Starts for Peridot_65:
(Start: 6 @40658 has 8 MA's), (22, 40742), (52, 40985), (57, 41024), (61, 41066),

Gene: Plumbus_66 Start: 41519, Stop: 42001, Start Num: 6
Candidate Starts for Plumbus_66:
(Start: 6 @41519 has 8 MA's), (22, 41603), (52, 41846), (57, 41885), (61, 41927),

Gene: Seanderson_3 Start: 1096, Stop: 1605, Start Num: 14
Candidate Starts for Seanderson_3:
(7, 1057), (Start: 14 @1096 has 7 MA's), (41, 1291), (42, 1300), (47, 1336), (67, 1558),

Gene: Slim_65 Start: 41999, Stop: 42481, Start Num: 6
Candidate Starts for Slim_65:
(Start: 6 @41999 has 8 MA's), (22, 42083), (52, 42326), (57, 42365), (61, 42407),

Gene: Smairt_2 Start: 926, Stop: 1435, Start Num: 14
Candidate Starts for Smairt_2:
(Start: 14 @926 has 7 MA's), (41, 1121), (42, 1130), (47, 1166), (67, 1388),

Gene: Smeagol_2 Start: 927, Stop: 1436, Start Num: 14
Candidate Starts for Smeagol_2:
(Start: 14 @927 has 7 MA's), (41, 1122), (42, 1131), (47, 1167), (67, 1389),

Gene: Smoothie_51 Start: 31978, Stop: 32439, Start Num: 13
Candidate Starts for Smoothie_51:
(Start: 13 @31978 has 3 MA's), (30, 32086), (36, 32125), (37, 32137), (45, 32185), (46, 32197), (50, 32233), (65, 32422), (66, 32425),

Gene: Totinger_63 Start: 40465, Stop: 40947, Start Num: 6
Candidate Starts for Totinger_63:
(Start: 6 @40465 has 8 MA's), (22, 40549), (52, 40792), (57, 40831), (61, 40873),

Gene: Vibaki_76 Start: 46752, Stop: 47243, Start Num: 15
Candidate Starts for Vibaki_76:
(Start: 15 @46752 has 3 MA's), (48, 47013),

Gene: Whitspit_3 Start: 1078, Stop: 1587, Start Num: 14
Candidate Starts for Whitspit_3:
(Start: 14 @1078 has 7 MA's), (41, 1273), (42, 1282), (47, 1318), (67, 1540),