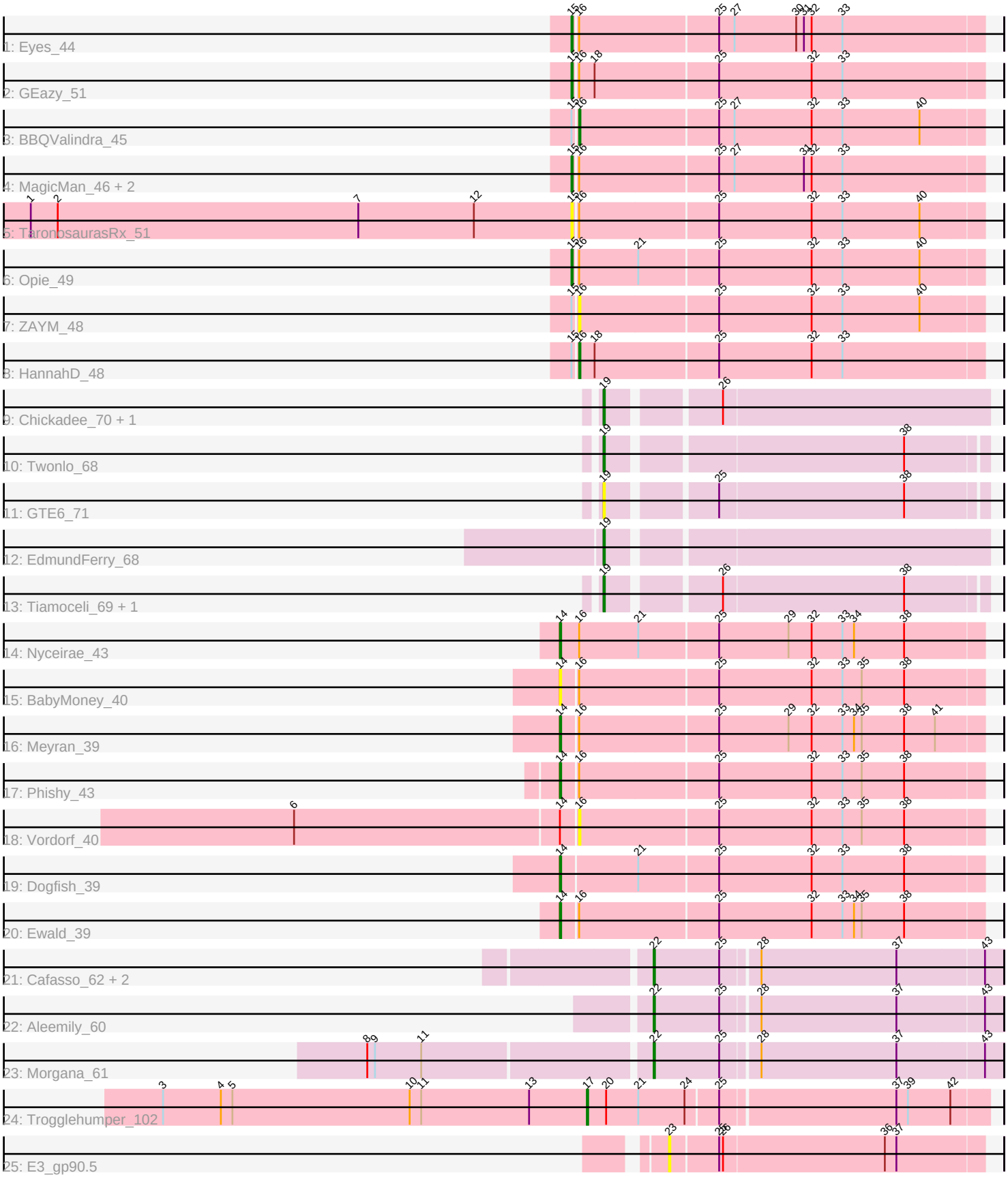
# Pham 216420


1: Eyes_44
2: GEazy_51
3: BBQValindra_45
4: MagicMan_46 + 2
5: TaronosaurasRx_51
6: Opie_49
7: ZAYM_48
8: HannahD_48
9: Chickadee_70 + 1
10: Twonlo_68
11: GTE6_71
12: EdmundFerry_68
13: Tiamoceli_69 + 1
14: Nyceirae_43
15: BabyMoney_40
16: Meyran_39
17: Phishy_43
18: Vordorf_40
19: Dogfish_39
20: Ewald_39
21: Cafasso_62 + 2
22: Aleemily_60
23: Morgana_61
24: Trogglehumper_102
25: E3_gp90.5

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 216420 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216420 has 31 members, 7 are drafts.

Phages represented in each track:
- Track 1 : Eyes_44
- Track 2 : GEazy_51
- Track 3 : BBQValindra_45
- Track 4 : MagicMan_46, Bowser_46, Schnabeltier_47
- Track 5 : TaronosaurasRx_51
- Track 6 : Opie_49
- Track 7 : ZAYM_48
- Track 8 : HannahD_48
- Track 9 : Chickadee_70, Kwekel_70
- Track 10 : Twonlo_68
- Track 11 : GTE6_71
- Track 12 : EdmundFerry_68
- Track 13 : Tiamoceli_69, RoadKill_67
- Track 14 : Nyceirae_43
- Track 15 : BabyMoney_40
- Track 16 : Meyran_39
- Track 17 : Phishy_43
- Track 18 : Vordorf_40
- Track 19 : Dogfish_39
- Track 20 : Ewald_39
- Track 21 : Cafasso_62, ObLaDi_61, ModicumRichard_61
- Track 22 : Aleemily_60
- Track 23 : Morgana_61
- Track 24 : Trogglehumper_102
- Track 25 : E3_gp90.5

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

The start number called the most often in the published annotations is 19, it was called in 6 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Chickadee_70, EdmundFerry_68, GTE6_71, Kwekel_70, RoadKill_67, Tiamoceli_69, Twonlo_68,

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

Genes that do not have the "Most Annotated" start:
• Aleemily_60, BBQValindra_45, BabyMoney_40, Bowser_46, Cafasso_62, Dogfish_39, E3_gp90.5, Ewald_39, Eyes_44, GEazy_51, HannahD_48, MagicMan_46, Meyran_39, ModicumRichard_61, Morgana_61, Nyceirae_43, ObLaDi_61, Opie_49, Phishy_43, Schnabeltier_47, TaronosaurasRx_51, Trogglehumper_102, Vordorf_40, ZAYM_48,

**Summary by start number:**

Start 14:
• Found in 7 of 31 ( 22.6% ) of genes in pham
• Manual Annotations of this start: 5 of 24
• Called 85.7% of time when present
• Phage (with cluster) where this start called: BabyMoney_40 (DT), Dogfish_39 (DT), Ewald_39 (DT), Meyran_39 (DT), Nyceirae_43 (DT), Phishy_43 (DT),

Start 15:
• Found in 10 of 31 ( 32.3% ) of genes in pham
• Manual Annotations of this start: 6 of 24
• Called 70.0% of time when present
• Phage (with cluster) where this start called: Bowser_46 (DB), Eyes_44 (DB), GEazy_51 (DB), MagicMan_46 (DB), Opie_49 (DB), Schnabeltier_47 (DB), TaronosaurasRx_51 (DB),

Start 16:
• Found in 16 of 31 ( 51.6% ) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 25.0% of time when present
• Phage (with cluster) where this start called: BBQValindra_45 (DB), HannahD_48 (DB), Vordorf_40 (DT), ZAYM_48 (DB),

Start 17:
• Found in 1 of 31 ( 3.2% ) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Trogglehumper_102 (singleton),

Start 19:
• Found in 7 of 31 ( 22.6% ) of genes in pham
• Manual Annotations of this start: 6 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chickadee_70 (DE3), EdmundFerry_68 (DE3), GTE6_71 (DE3), Kwekel_70 (DE3), RoadKill_67 (DE3), Tiamoceli_69 (DE3), Twonlo_68 (DE3),

Start 22:
• Found in 5 of 31 ( 16.1% ) of genes in pham
• Manual Annotations of this start: 4 of 24
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Aleemily_60 (DZ), Cafasso_62 (DZ), ModicumRichard_61 (DZ), Morgana_61 (DZ), ObLaDi_61 (DZ),

Start 23:
• Found in 1 of 31 ( 3.2% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: E3_gp90.5 (singleton),

**Summary by clusters:**

There are 5 clusters represented in this pham: DB, singleton, DE3, DZ, DT,

Info for manual annotations of cluster DB:
•Start number 15 was manually annotated 6 times for cluster DB.
•Start number 16 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DE3:
•Start number 19 was manually annotated 6 times for cluster DE3.

Info for manual annotations of cluster DT:
•Start number 14 was manually annotated 5 times for cluster DT.

Info for manual annotations of cluster DZ:
•Start number 22 was manually annotated 4 times for cluster DZ.

***Gene Information:***

Gene: Aleemily_60 Start: 42108, Stop: 42371, Start Num: 22
Candidate Starts for Aleemily_60:
(Start: 22 @42108 has 4 MA's), (25, 42159), (28, 42186), (37, 42291), (43, 42357),

Gene: BBQValindra_45 Start: 34573, Stop: 34881, Start Num: 16
Candidate Starts for BBQValindra_45:
(Start: 15 @34570 has 6 MA's), (Start: 16 @34573 has 2 MA's), (25, 34678), (27, 34690), (32, 34750), (33, 34774), (40, 34834),

Gene: BabyMoney_40 Start: 31859, Stop: 32179, Start Num: 14
Candidate Starts for BabyMoney_40:
(Start: 14 @31859 has 5 MA's), (Start: 16 @31871 has 2 MA's), (25, 31976), (32, 32048), (33, 32072), (35, 32087), (38, 32120),

Gene: Bowser_46 Start: 34379, Stop: 34690, Start Num: 15
Candidate Starts for Bowser_46:
(Start: 15 @34379 has 6 MA's), (Start: 16 @34382 has 2 MA's), (25, 34487), (27, 34499), (31, 34553), (32, 34559), (33, 34583),

Gene: Cafasso_62 Start: 42732, Stop: 42995, Start Num: 22
Candidate Starts for Cafasso_62:
(Start: 22 @42732 has 4 MA's), (25, 42783), (28, 42810), (37, 42915), (43, 42981),

Gene: Chickadee_70 Start: 50218, Stop: 50499, Start Num: 19
Candidate Starts for Chickadee_70:
(Start: 19 @50218 has 6 MA's), (26, 50296),

Gene: Dogfish_39 Start: 31289, Stop: 31609, Start Num: 14
Candidate Starts for Dogfish_39:
(Start: 14 @31289 has 5 MA's), (21, 31346), (25, 31406), (32, 31478), (33, 31502), (38, 31550),

Gene: E3_gp90.5 Start: 52452, Stop: 52688, Start Num: 23
Candidate Starts for E3_gp90.5:
(23, 52452), (25, 52488), (26, 52491), (36, 52614), (37, 52623),

Gene: EdmundFerry_68 Start: 49770, Stop: 50051, Start Num: 19
Candidate Starts for EdmundFerry_68:
(Start: 19 @49770 has 6 MA's),

Gene: Ewald_39 Start: 31107, Stop: 31427, Start Num: 14
Candidate Starts for Ewald_39:
(Start: 14 @31107 has 5 MA's), (Start: 16 @31119 has 2 MA's), (25, 31224), (32, 31296), (33, 31320), (34, 31329), (35, 31335), (38, 31368),

Gene: Eyes_44 Start: 34423, Stop: 34734, Start Num: 15
Candidate Starts for Eyes_44:
(Start: 15 @34423 has 6 MA's), (Start: 16 @34426 has 2 MA's), (25, 34531), (27, 34543), (30, 34591), (31, 34597), (32, 34603), (33, 34627),

Gene: GEazy_51 Start: 34698, Stop: 35009, Start Num: 15
Candidate Starts for GEazy_51:
(Start: 15 @34698 has 6 MA's), (Start: 16 @34701 has 2 MA's), (18, 34713), (25, 34806), (32, 34878), (33, 34902),

Gene: GTE6_71 Start: 51011, Stop: 51286, Start Num: 19
Candidate Starts for GTE6_71:
(Start: 19 @51011 has 6 MA's), (25, 51086), (38, 51227),

Gene: HannahD_48 Start: 34068, Stop: 34376, Start Num: 16
Candidate Starts for HannahD_48:
(Start: 15 @34065 has 6 MA's), (Start: 16 @34068 has 2 MA's), (18, 34080), (25, 34173), (32, 34245), (33, 34269),

Gene: Kwekel_70 Start: 50131, Stop: 50412, Start Num: 19
Candidate Starts for Kwekel_70:
(Start: 19 @50131 has 6 MA's), (26, 50209),

Gene: MagicMan_46 Start: 34305, Stop: 34616, Start Num: 15
Candidate Starts for MagicMan_46:
(Start: 15 @34305 has 6 MA's), (Start: 16 @34308 has 2 MA's), (25, 34413), (27, 34425), (31, 34479), (32, 34485), (33, 34509),

Gene: Meyran_39 Start: 32181, Stop: 32501, Start Num: 14
Candidate Starts for Meyran_39:
(Start: 14 @32181 has 5 MA's), (Start: 16 @32193 has 2 MA's), (25, 32298), (29, 32352), (32, 32370), (33, 32394), (34, 32403), (35, 32409), (38, 32442), (41, 32466),

Gene: ModicumRichard_61 Start: 42735, Stop: 42998, Start Num: 22
Candidate Starts for ModicumRichard_61:
(Start: 22 @42735 has 4 MA's), (25, 42786), (28, 42813), (37, 42918), (43, 42984),

Gene: Morgana_61 Start: 42693, Stop: 42956, Start Num: 22
Candidate Starts for Morgana_61:
(8, 42483), (9, 42489), (11, 42525), (Start: 22 @42693 has 4 MA's), (25, 42744), (28, 42771), (37, 42876), (43, 42942),

Gene: Nyceirae_43 Start: 31992, Stop: 32315, Start Num: 14
Candidate Starts for Nyceirae_43:
(Start: 14 @31992 has 5 MA's), (Start: 16 @32007 has 2 MA's), (21, 32052), (25, 32112), (29, 32166), (32, 32184), (33, 32208), (34, 32217), (38, 32256),

Gene: ObLaDi_61 Start: 42680, Stop: 42943, Start Num: 22
Candidate Starts for ObLaDi_61:
(Start: 22 @42680 has 4 MA's), (25, 42731), (28, 42758), (37, 42863), (43, 42929),

Gene: Opie_49 Start: 35250, Stop: 35561, Start Num: 15
Candidate Starts for Opie_49:
(Start: 15 @35250 has 6 MA's), (Start: 16 @35253 has 2 MA's), (21, 35298), (25, 35358), (32, 35430), (33, 35454), (40, 35514),

Gene: Phishy_43 Start: 33178, Stop: 33498, Start Num: 14
Candidate Starts for Phishy_43:
(Start: 14 @33178 has 5 MA's), (Start: 16 @33190 has 2 MA's), (25, 33295), (32, 33367), (33, 33391), (35, 33406), (38, 33439),

Gene: RoadKill_67 Start: 49636, Stop: 49911, Start Num: 19
Candidate Starts for RoadKill_67:
(Start: 19 @49636 has 6 MA's), (26, 49714), (38, 49852),

Gene: Schnabeltier_47 Start: 34498, Stop: 34809, Start Num: 15
Candidate Starts for Schnabeltier_47:
(Start: 15 @34498 has 6 MA's), (Start: 16 @34501 has 2 MA's), (25, 34606), (27, 34618), (31, 34672), (32, 34678), (33, 34702),

Gene: TaronosaurasRx_51 Start: 33823, Stop: 34134, Start Num: 15
Candidate Starts for TaronosaurasRx_51:
(1, 33403), (2, 33424), (7, 33658), (12, 33748), (Start: 15 @33823 has 6 MA's), (Start: 16 @33826 has 2 MA's), (25, 33931), (32, 34003), (33, 34027), (40, 34087),

Gene: Tiamoceli_69 Start: 51098, Stop: 51373, Start Num: 19
Candidate Starts for Tiamoceli_69:
(Start: 19 @51098 has 6 MA's), (26, 51176), (38, 51314),

Gene: Trogglehumper_102 Start: 71943, Stop: 71644, Start Num: 17
Candidate Starts for Trogglehumper_102:
(3, 72273), (4, 72228), (5, 72219), (10, 72081), (11, 72072), (13, 71988), (Start: 17 @71943 has 1 MA's), (20, 71928), (21, 71904), (24, 71868), (25, 71844), (37, 71712), (39, 71703), (42, 71670),

Gene: Twonlo_68 Start: 50190, Stop: 50465, Start Num: 19

Candidate Starts for Twonlo_68:
(Start: 19 @50190 has 6 MA's), (38, 50406),

Gene: Vordorf_40 Start: 31456, Stop: 31764, Start Num: 16
Candidate Starts for Vordorf_40:
(6, 31240), (Start: 14 @31444 has 5 MA's), (Start: 16 @31456 has 2 MA's), (25, 31561), (32, 31633), (33, 31657), (35, 31672), (38, 31705),

Gene: ZAYM_48 Start: 33574, Stop: 33882, Start Num: 16
Candidate Starts for ZAYM_48:
(Start: 15 @33571 has 6 MA's), (Start: 16 @33574 has 2 MA's), (25, 33679), (32, 33751), (33, 33775), (40, 33835),