

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 203240 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203240 has 26 members, 12 are drafts.

Phages represented in each track:

- Track 1 : PascalRango\_68, GMonster\_68
- Track 2 : Teodoridan\_42, Ringer\_45
- Track 3 : Sanya\_67
- Track 4 : STLscum 45
- Track 5 : IttyBittyPiggy\_27Track 6 : MiniMommy\_31, ShakeItOph\_31, JasmineDragon\_30
- Track 7 : LadyAstra 31
- Track 8: VroomVroom 30
- Track 9 : ColdSoup\_3, Jollymon\_3, Amo99\_3
- Track 10 : Sting 3
- Track 11: Gezellig 84
- Track 12 : LilyPad 61
- Track 13 : DatBoi 107
- Track 14 : MintFritos\_94, ChisanaKitsune\_96
- Track 15 : RedWattleHog 18
- Track 16: JoeDirt 76, OhShagHennessy 74
- Track 17 : Blessica\_13
- Track 18 : Finch 82

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

The start number called the most often in the published annotations is 36, it was called in 2 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 JasmineDragon\_30, LadyAstra\_31, MiniMommy\_31, ShakeItOph\_31, VroomVroom\_30,

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

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

 Amo99\_3, Blessica\_13, ChisanaKitsune\_96, ColdSoup\_3, DatBoi\_107, Finch\_82, GMonster\_68, Gezellig\_84, IttyBittyPiggy\_27, JoeDirt\_76, Jollymon\_3, LilyPad\_61,

MintFritos\_94, OhShagHennessy\_74, PascalRango\_68, RedWattleHog\_18, Ringer\_45, STLscum\_45, Sanya\_67, Sting\_3, Teodoridan\_42,

## **Summary by start number:**

## Start 4:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Blessica\_13 (O),

### Start 5:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilyPad\_61 (DG1),

#### Start 13:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog\_18 (DX),

#### Start 22:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch\_82 (singleton),

#### Start 23:

- Found in 4 of 26 (15.4%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amo99\_3 (CP), ColdSoup\_3 (CP),
  Jollymon\_3 (CP), Sting\_3 (CP),

#### Start 29:

- Found in 2 of 26 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChisanaKitsune\_96 (DQ), MintFritos\_94 (DQ),

#### Start 30:

- Found in 2 of 26 (7.7%) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JoeDirt\_76 (L1), OhShagHennessy\_74 (L1),

## Start 32:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 14

- Called 100.0% of time when present
- Phage (with cluster) where this start called: DatBoi\_107 (DL),

## Start 33:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gezellig\_84 (DC1),

### Start 36:

- Found in 5 of 26 (19.2%) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JasmineDragon\_30 (AZ4),
  LadyAstra\_31 (AZ4), MiniMommy\_31 (AZ4), ShakeItOph\_31 (AZ4), VroomVroom\_30 (AZ4),

### Start 37:

- Found in 1 of 26 (3.8%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: IttyBittyPiggy\_27 (AZ1),

## Start 40:

- Found in 6 of 26 (23.1%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Ringer\_45 (A1), Teodoridan\_42 (A1),

#### Start 45:

- Found in 3 of 26 (11.5%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMonster\_68 (A1), PascalRango\_68 (A1), Sanya\_67 (A1),

#### Start 50:

- Found in 11 of 26 (42.3%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 9.1% of time when present
- Phage (with cluster) where this start called: STLscum\_45 (A1),

## Summary by clusters:

There are 12 clusters represented in this pham: singleton, DC1, DL, O, A1, DG1, DX, L1, AZ1, CP, AZ4, DQ,

#### Info for manual annotations of cluster A1:

- Start number 40 was manually annotated 1 time for cluster A1.
- •Start number 45 was manually annotated 1 time for cluster A1.
- Start number 50 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster AZ4:

•Start number 36 was manually annotated 2 times for cluster AZ4.

Info for manual annotations of cluster CP:

•Start number 23 was manually annotated 1 time for cluster CP.

Info for manual annotations of cluster DG1:

•Start number 5 was manually annotated 1 time for cluster DG1.

Info for manual annotations of cluster DL:

•Start number 32 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DQ:

•Start number 29 was manually annotated 1 time for cluster DQ.

Info for manual annotations of cluster DX:

•Start number 13 was manually annotated 1 time for cluster DX.

Info for manual annotations of cluster L1:

•Start number 30 was manually annotated 2 times for cluster L1.

Info for manual annotations of cluster O:

•Start number 4 was manually annotated 1 time for cluster O.

## Gene Information:

Gene: Amo99\_3 Start: 2875, Stop: 3255, Start Num: 23

Candidate Starts for Amo99 3:

(Start: 23 @2875 has 1 MA's), (Start: 40 @2959 has 1 MA's), (44, 2992), (46, 3019), (Start: 50 @3031 has 1 MA's), (51, 3034), (70, 3145), (75, 3181), (83, 3235), (85, 3244),

Gene: Blessica 13 Start: 5453, Stop: 5890, Start Num: 4

Candidate Starts for Blessica\_13:

(Start: 4 @5453 has 1 MA's), (12, 5477), (18, 5501), (39, 5594), (Start: 50 @5681 has 1 MA's), (72, 5795), (73, 5804), (80, 5837), (81, 5840), (82, 5855),

Gene: ChisanaKitsune 96 Start: 72440, Stop: 72853, Start Num: 29

Candidate Starts for ChisanaKitsune 96:

(15, 72365), (19, 72383), (Start: 29 @72440 has 1 MA's), (44, 72536), (46, 72563), (Start: 50 @72575 has 1 MA's), (51, 72578), (58, 72626),

Gene: ColdSoup\_3 Start: 2875, Stop: 3255, Start Num: 23

Candidate Starts for ColdSoup\_3:

 $(Start: 23 @2875 \ has 1 \ MA's), (Start: 40 @2959 \ has 1 \ MA's), (44, 2992), (46, 3019), (Start: 50 @3031 \ has 1 \ MA's), (51, 3034), (70, 3145), (75, 3181), (83, 3235), (85, 3244),$ 

Gene: DatBoi 107 Start: 69816, Stop: 70166, Start Num: 32

Candidate Starts for DatBoi 107:

(7, 69714), (10, 69726), (Start: 32 @69816 has 1 MA's), (60, 69981), (66, 70017), (68, 70029), (77, 70077), (84, 70128), (86, 70137),

Gene: Finch\_82 Start: 71334, Stop: 71777, Start Num: 22

Candidate Starts for Finch\_82:

(3, 71253), (11, 71289), (Start: 22 @71334 has 1 MA's), (31, 71382), (48, 71505), (Start: 50 @71508 has 1 MA's), (58, 71559), (71, 71625), (74, 71655),

Gene: GMonster\_68 Start: 44686, Stop: 44306, Start Num: 45

Candidate Starts for GMonster 68:

(8, 44884), (12, 44872), (17, 44854), (43, 44713), (Start: 45 @ 44686 has 1 MA's), (52, 44647), (55, 44617), (88, 44404),

Gene: Gezellig 84 Start: 55587, Stop: 55165, Start Num: 33

Candidate Starts for Gezellig\_84:

(12, 55686), (14, 55680), (17, 55668), (24, 55632), (33, 55587), (38, 55572), (46, 55494), (53, 55467), (55, 55446), (61, 55422), (92, 55212), (93, 55200), (94, 55176),

Gene: IttyBittyPiggy\_27 Start: 22317, Stop: 22682, Start Num: 37

Candidate Starts for IttyBittyPiggy\_27:

(2, 22149), (37, 22317), (61, 22482), (67, 22521), (69, 22533),

Gene: JasmineDragon\_30 Start: 22617, Stop: 23000, Start Num: 36

Candidate Starts for JasmineDragon\_30:

(1, 22437), (Start: 36 @ 22617 has 2 MA's), (63, 22791), (72, 22851),

Gene: JoeDirt\_76 Start: 51825, Stop: 52229, Start Num: 30

Candidate Starts for JoeDirt\_76:

(16, 51750), (27, 51816), (Start: 30 @51825 has 2 MA's), (41, 51876), (42, 51894), (47, 51951), (49, 51954), (59, 52011), (67, 52053), (68, 52062), (69, 52065), (76, 52110), (77, 52113),

Gene: Jollymon\_3 Start: 2875, Stop: 3255, Start Num: 23

Candidate Starts for Jollymon\_3:

(Start: 23 @2875 has 1 MA's), (Start: 40 @2959 has 1 MA's), (44, 2992), (46, 3019), (Start: 50 @3031 has 1 MA's), (51, 3034), (70, 3145), (75, 3181), (83, 3235), (85, 3244),

Gene: LadyAstra\_31 Start: 22651, Stop: 23034, Start Num: 36

Candidate Starts for LadyAstra\_31:

(21, 22591), (Start: 36 @ 22651 has 2 MA's), (72, 22885),

Gene: LilyPad\_61 Start: 44847, Stop: 45245, Start Num: 5

Candidate Starts for LilyPad\_61:

(Start: 5 @ 44847 has 1 MA's), (6, 44853), (28, 44955), (42, 45030), (51, 45090), (55, 45123), (62, 45150), (64, 45165), (70, 45201),

Gene: MiniMommy\_31 Start: 22618, Stop: 23001, Start Num: 36

Candidate Starts for MiniMommy 31:

(1, 22438), (Start: 36 @22618 has 2 MA's), (63, 22792), (72, 22852),

Gene: MintFritos\_94 Start: 72730, Stop: 73143, Start Num: 29

Candidate Starts for MintFritos\_94:

(15, 72655), (19, 72673), (Start: 29 @72730 has 1 MA's), (44, 72826), (46, 72853), (Start: 50 @72865 has 1 MA's), (51, 72868), (58, 72916),

Gene: OhShagHennessy\_74 Start: 50528, Stop: 50932, Start Num: 30

Candidate Starts for OhShagHennessy\_74:

(16, 50453), (27, 50519), (Start: 30 @50528 has 2 MA's), (41, 50579), (42, 50597), (47, 50654), (49, 50657), (59, 50714), (67, 50756), (68, 50765), (69, 50768), (76, 50813), (77, 50816),

Gene: PascalRango\_68 Start: 44439, Stop: 44059, Start Num: 45

Candidate Starts for PascalRango 68:

(8, 44637), (12, 44625), (17, 44607), (43, 44466), (Start: 45 @ 44439 has 1 MA's), (52, 44400), (55, 44370), (88, 44157),

Gene: RedWattleHog\_18 Start: 21845, Stop: 22282, Start Num: 13

Candidate Starts for RedWattleHog 18:

(Start: 13 @21845 has 1 MA's), (25, 21908), (34, 21947), (35, 21950), (39, 21968), (65, 22148), (79, 22226), (84, 22271),

Gene: Ringer\_45 Start: 33671, Stop: 33282, Start Num: 40

Candidate Starts for Ringer\_45:

(9, 33806), (20, 33767), (26, 33725), (Start: 40 @33671 has 1 MA's), (Start: 50 @33596 has 1 MA's), (54, 33572), (55, 33560), (56, 33554), (57, 33551), (82, 33404), (87, 33368), (93, 33311),

Gene: STLscum\_45 Start: 33801, Stop: 33487, Start Num: 50

Candidate Starts for STLscum\_45:

(Start: 50 @33801 has 1 MA's), (54, 33777), (55, 33765), (56, 33759), (57, 33756), (64, 33723), (78, 33642), (82, 33609), (89, 33543), (90, 33540), (91, 33531), (93, 33516),

Gene: Sanya\_67 Start: 45283, Stop: 44903, Start Num: 45

Candidate Starts for Sanya\_67:

(8, 45481), (12, 45469), (17, 45451), (43, 45310), (Start: 45 @ 45283 has 1 MA's), (52, 45244), (55, 45214), (88, 45001),

Gene: ShakeltOph\_31 Start: 22617, Stop: 23000, Start Num: 36

Candidate Starts for ShakeltOph\_31:

(1, 22437), (Start: 36 @22617 has 2 MA's), (63, 22791), (72, 22851),

Gene: Sting\_3 Start: 2872, Stop: 3252, Start Num: 23

Candidate Starts for Sting\_3:

(Start: 23 @2872 has 1 MA's), (Start: 40 @2956 has 1 MA's), (44, 2989), (46, 3016), (Start: 50 @3028 has 1 MA's), (51, 3031), (58, 3079), (70, 3142), (75, 3178), (83, 3232), (85, 3241),

Gene: Teodoridan\_42 Start: 32338, Stop: 31949, Start Num: 40

Candidate Starts for Teodoridan\_42:

(9, 32473), (20, 32434), (26, 32392), (Start: 40 @32338 has 1 MA's), (Start: 50 @32263 has 1 MA's), (54, 32239), (55, 32227), (56, 32221), (57, 32218), (82, 32071), (87, 32035), (93, 31978),

Gene: VroomVroom 30 Start: 22712, Stop: 23095, Start Num: 36

Candidate Starts for VroomVroom 30:

(1, 22532), (Start: 36 @22712 has 2 MA's), (72, 22946),