Pham 344116


1: Beans_42
2: Piccoletto_42
3: Franzy_42 + 1
4: NathanVaag_42
5: BigDome_44 + 1
6: Martha_44 + 4
7: Zartrosa_44
8: Timinator_44 + 1
9: Pippa_46
10: JKerns_44
11: GravityBall_44 + 1
12: Nikan_60
13: Kabreeze_62 + 2
14: Chocolat_65 + 7
15: Chocolat_62 + 5
16: JaNo_65 + 1
17: Kabreeze_65 + 1
18: KBurrousTX_62
19: Linus_65
20: DrYang_64
21: Bhageatrice_49
22: Altadena_65
23: Circuit_66
24: Bumble_65

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 344116 Report

This analysis was run 11/14/26 on database version 672.

Pham number 344116 has 48 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Beans_42
• Track 2 : Piccoletto_42
• Track 3 : Franzy_42, Brent_42
• Track 4 : NathanVaag_42
• Track 5 : BigDome_44, BarretLemon_44
• Track 6 : Martha_44, Grekaycon_44, TaeYoung_44, Sonny_44, Jordan_44
• Track 7 : Zartrosa_44
• Track 8 : Timinator_44, LeeroyJ_44
• Track 9 : Pippa_46
• Track 10 : JKerns_44
• Track 11 : GravityBall_44, StevieBAY_44
• Track 12 : Nikan_60
• Track 13 : Kabreeze_62, HumptyDumpty_62, Linus_62
• Track 14 : Chocolat_65, Conboy_64, EdgarPoe_64, Chubster_66, MoyaNatalis_65, Tophat_65, PrincessTrina_65, Chipper1996_650
• Track 15 : Chocolat_62, Chubster_63, MoyaNatalis_62, Colucci_64, RosiePosie_61, JayCookie_63
• Track 16 : JaNo_65, Mordred_65
• Track 17 : Kabreeze_65, HumptyDumpty_65
• Track 18 : KBurrousTX_62
• Track 19 : Linus_65
• Track 20 : DrYang_64
• Track 21 : Bhageatrice_49
• Track 22 : Altadena_65
• Track 23 : Circuit_66
• Track 24 : Bumble_65

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 19 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BarretLemon_44, Beans_42, BigDome_44, Brent_42, Franzy_42, GravityBall_44, Grekaycon_44, JKerns_44, Jordan_44, LeeroyJ_44, Martha_44, NathanVaag_42, Piccoletto_42, Pippa_46, Sonny_44, StevieBAY_44, TaeYoung_44, Timinator_44, Zartrosa_44,

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

Genes that do not have the "Most Annotated" start:
• Altadena_65, Bhageatrice_49, Bumble_65, Chipper1996_650, Chocolat_62, Chocolat_65, Chubster_63, Chubster_66, Circuit_66, Colucci_64, Conboy_64, DrYang_64, EdgarPoe_64, HumptyDumpty_62, HumptyDumpty_65, JaNo_65, JayCookie_63, KBurrousTX_62, Kabreeze_62, Kabreeze_65, Linus_62, Linus_65, Mordred_65, MoyaNatalis_62, MoyaNatalis_65, Nikan_60, PrincessTrina_65, RosiePosie_61, Tophat_65,

Summary by start number:

Start 12:
• Found in 19 of 48 (39.6%) of genes in pham
• Manual Annotations of this start: 19 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BarretLemon_44 (AO2), Beans_42 (AO1), BigDome_44 (AO2), Brent_42 (AO1), Franzy_42 (AO1), GravityBall_44 (AO2), Grekaycon_44 (AO2), JKerns_44 (AO2), Jordan_44 (AO2), LeeroyJ_44 (AO2), Martha_44 (AO2), NathanVaag_42 (AO1), Piccoletto_42 (AO1), Pippa_46 (AO2), Sonny_44 (AO2), StevieBAY_44 (AO2), TaeYoung_44 (AO2), Timinator_44 (AO2), Zartrosa_44 (AO2),

Start 13:
• Found in 1 of 48 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bhageatrice_49 (AY),

Start 16:
• Found in 2 of 48 (4.2%) of genes in pham
• Manual Annotations of this start: 2 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bumble_65 (FH), Circuit_66 (FH),

Start 17:
• Found in 13 of 48 (27.1%) of genes in pham
• Manual Annotations of this start: 12 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chipper1996_650 (AR), Chocolat_65 (AR), Chubster_66 (AR), Conboy_64 (AR), EdgarPoe_64 (AR), HumptyDumpty_65 (AR), JaNo_65 (AR), Kabreeze_65 (AR), Linus_65 (AR), Mordred_65 (AR), MoyaNatalis_65 (AR), PrincessTrina_65 (AR), Tophat_65 (AR),

Start 18:
• Found in 15 of 48 (31.2%) of genes in pham
• Manual Annotations of this start: 1 of 46

• Called 6.7% of time when present
• Phage (with cluster) where this start called: DrYang_64 (AR),

Start 19:
• Found in 10 of 48 (20.8%) of genes in pham
• Manual Annotations of this start: 5 of 46
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Chocolat_62 (AR), Chubster_63 (AR), Colucci_64 (AR), JayCookie_63 (AR), MoyaNatalis_62 (AR), RosiePosie_61 (AR),

Start 22:
• Found in 1 of 48 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nikan_60 (AP2),

Start 23:
• Found in 10 of 48 (20.8%) of genes in pham
• Manual Annotations of this start: 4 of 46
• Called 40.0% of time when present
• Phage (with cluster) where this start called: HumptyDumpty_62 (AR), KBurrousTX_62 (AR), Kabreeze_62 (AR), Linus_62 (AR),

Start 34:
• Found in 1 of 48 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Altadena_65 (FH),

Summary by clusters:

There are 6 clusters represented in this pham: AP2, AY, AR, AO2, AO1, FH,

Info for manual annotations of cluster AO1:
•Start number 12 was manually annotated 5 times for cluster AO1.

Info for manual annotations of cluster AO2:
•Start number 12 was manually annotated 14 times for cluster AO2.

Info for manual annotations of cluster AP2:
•Start number 22 was manually annotated 1 time for cluster AP2.

Info for manual annotations of cluster AR:
•Start number 17 was manually annotated 12 times for cluster AR.
•Start number 18 was manually annotated 1 time for cluster AR.
•Start number 19 was manually annotated 5 times for cluster AR.
•Start number 23 was manually annotated 4 times for cluster AR.

Info for manual annotations of cluster AY:
•Start number 13 was manually annotated 1 time for cluster AY.

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

•Start number 34 was manually annotated 1 time for cluster FH.

Gene Information:

Gene: Altadena_65 Start: 42328, Stop: 42143, Start Num: 34
Candidate Starts for Altadena_65:
(10, 42721), (27, 42436), (Start: 34 @42328 has 1 MA's),

Gene: BarretLemon_44 Start: 34970, Stop: 35122, Start Num: 12
Candidate Starts for BarretLemon_44:
(2, 34739), (Start: 12 @34970 has 19 MA's), (32, 35099),

Gene: Beans_42 Start: 34760, Stop: 34993, Start Num: 12
Candidate Starts for Beans_42:
(8, 34589), (Start: 12 @34760 has 19 MA's), (Start: 18 @34823 has 1 MA's), (32, 34970),

Gene: Bhageatrice_49 Start: 32024, Stop: 32257, Start Num: 13
Candidate Starts for Bhageatrice_49:
(Start: 13 @32024 has 1 MA's), (15, 32045),

Gene: BigDome_44 Start: 34994, Stop: 35146, Start Num: 12
Candidate Starts for BigDome_44:
(2, 34763), (Start: 12 @34994 has 19 MA's), (32, 35123),

Gene: Brent_42 Start: 34704, Stop: 34937, Start Num: 12
Candidate Starts for Brent_42:
(Start: 12 @34704 has 19 MA's), (Start: 18 @34767 has 1 MA's), (32, 34914),

Gene: Bumble_65 Start: 43235, Stop: 43035, Start Num: 16
Candidate Starts for Bumble_65:
(6, 43451), (Start: 16 @43235 has 2 MA's), (24, 43184), (25, 43181),

Gene: Chipper1996_650 Start: 45331, Stop: 45504, Start Num: 17
Candidate Starts for Chipper1996_650:
(Start: 17 @45331 has 12 MA's), (21, 45367), (26, 45382),

Gene: Chocolat_65 Start: 45356, Stop: 45529, Start Num: 17
Candidate Starts for Chocolat_65:
(Start: 17 @45356 has 12 MA's), (21, 45392), (26, 45407),

Gene: Chocolat_62 Start: 44717, Stop: 44875, Start Num: 19
Candidate Starts for Chocolat_62:
(Start: 19 @44717 has 5 MA's), (Start: 23 @44726 has 4 MA's), (28, 44777), (29, 44789), (30, 44798), (35, 44867),

Gene: Chubster_66 Start: 45508, Stop: 45681, Start Num: 17
Candidate Starts for Chubster_66:
(Start: 17 @45508 has 12 MA's), (21, 45544), (26, 45559),

Gene: Chubster_63 Start: 44869, Stop: 45027, Start Num: 19
Candidate Starts for Chubster_63:

(Start: 19 @44869 has 5 MA's), (Start: 23 @44878 has 4 MA's), (28, 44929), (29, 44941), (30, 44950), (35, 45019),

Gene: Circuit_66 Start: 43968, Stop: 43759, Start Num: 16
Candidate Starts for Circuit_66:
(5, 44205), (Start: 16 @43968 has 2 MA's), (25, 43914),

Gene: Colucci_64 Start: 44773, Stop: 44931, Start Num: 19
Candidate Starts for Colucci_64:
(Start: 19 @44773 has 5 MA's), (Start: 23 @44782 has 4 MA's), (28, 44833), (29, 44845), (30, 44854), (35, 44923),

Gene: Conboy_64 Start: 45195, Stop: 45368, Start Num: 17
Candidate Starts for Conboy_64:
(Start: 17 @45195 has 12 MA's), (21, 45231), (26, 45246),

Gene: DrYang_64 Start: 46974, Stop: 47150, Start Num: 18
Candidate Starts for DrYang_64:
(Start: 18 @46974 has 1 MA's), (21, 47001), (26, 47016),

Gene: EdgarPoe_64 Start: 45195, Stop: 45368, Start Num: 17
Candidate Starts for EdgarPoe_64:
(Start: 17 @45195 has 12 MA's), (21, 45231), (26, 45246),

Gene: Franzy_42 Start: 34720, Stop: 34953, Start Num: 12
Candidate Starts for Franzy_42:
(Start: 12 @34720 has 19 MA's), (Start: 18 @34783 has 1 MA's), (32, 34930),

Gene: GravityBall_44 Start: 34997, Stop: 35182, Start Num: 12
Candidate Starts for GravityBall_44:
(2, 34769), (Start: 12 @34997 has 19 MA's), (Start: 18 @35009 has 1 MA's), (32, 35159),

Gene: Grekaycon_44 Start: 34909, Stop: 35142, Start Num: 12
Candidate Starts for Grekaycon_44:
(Start: 12 @34909 has 19 MA's), (Start: 18 @34972 has 1 MA's), (32, 35119),

Gene: HumptyDumpty_62 Start: 44665, Stop: 44814, Start Num: 23
Candidate Starts for HumptyDumpty_62:
(Start: 19 @44656 has 5 MA's), (Start: 23 @44665 has 4 MA's), (28, 44716), (29, 44728), (30, 44737), (35, 44806),

Gene: HumptyDumpty_65 Start: 45295, Stop: 45468, Start Num: 17
Candidate Starts for HumptyDumpty_65:
(Start: 17 @45295 has 12 MA's), (21, 45331),

Gene: JKerns_44 Start: 34994, Stop: 35236, Start Num: 12
Candidate Starts for JKerns_44:
(1, 34610), (4, 34808), (10, 34874), (11, 34892), (Start: 12 @34994 has 19 MA's), (30, 35159), (31, 35162), (32, 35213),

Gene: JaNo_65 Start: 45418, Stop: 45591, Start Num: 17
Candidate Starts for JaNo_65:
(Start: 17 @45418 has 12 MA's), (21, 45454), (26, 45469),

Gene: JayCookie_63 Start: 45128, Stop: 45286, Start Num: 19
Candidate Starts for JayCookie_63:
(Start: 19 @45128 has 5 MA's), (Start: 23 @45137 has 4 MA's), (28, 45188), (29, 45200), (30, 45209), (35, 45278),

Gene: Jordan_44 Start: 34995, Stop: 35228, Start Num: 12
Candidate Starts for Jordan_44:
(Start: 12 @34995 has 19 MA's), (Start: 18 @35058 has 1 MA's), (32, 35205),

Gene: KBurrousTX_62 Start: 46014, Stop: 46151, Start Num: 23
Candidate Starts for KBurrousTX_62:
(Start: 19 @46005 has 5 MA's), (Start: 23 @46014 has 4 MA's), (28, 46065), (30, 46086), (33, 46137),

Gene: Kabreeze_62 Start: 44744, Stop: 44893, Start Num: 23
Candidate Starts for Kabreeze_62:
(Start: 19 @44735 has 5 MA's), (Start: 23 @44744 has 4 MA's), (28, 44795), (29, 44807), (30, 44816), (35, 44885),

Gene: Kabreeze_65 Start: 45374, Stop: 45547, Start Num: 17
Candidate Starts for Kabreeze_65:
(Start: 17 @45374 has 12 MA's), (21, 45410),

Gene: LeeroyJ_44 Start: 34936, Stop: 35121, Start Num: 12
Candidate Starts for LeeroyJ_44:
(2, 34708), (3, 34720), (Start: 12 @34936 has 19 MA's), (Start: 18 @34948 has 1 MA's), (32, 35098),

Gene: Linus_65 Start: 45497, Stop: 45670, Start Num: 17
Candidate Starts for Linus_65:
(Start: 17 @45497 has 12 MA's), (20, 45530), (21, 45533), (26, 45548),

Gene: Linus_62 Start: 44867, Stop: 45016, Start Num: 23
Candidate Starts for Linus_62:
(Start: 19 @44858 has 5 MA's), (Start: 23 @44867 has 4 MA's), (28, 44918), (29, 44930), (30, 44939), (35, 45008),

Gene: Martha_44 Start: 34886, Stop: 35119, Start Num: 12
Candidate Starts for Martha_44:
(Start: 12 @34886 has 19 MA's), (Start: 18 @34949 has 1 MA's), (32, 35096),

Gene: Mordred_65 Start: 45412, Stop: 45585, Start Num: 17
Candidate Starts for Mordred_65:
(Start: 17 @45412 has 12 MA's), (21, 45448), (26, 45463),

Gene: MoyaNatalis_65 Start: 45343, Stop: 45516, Start Num: 17
Candidate Starts for MoyaNatalis_65:
(Start: 17 @45343 has 12 MA's), (21, 45379), (26, 45394),

Gene: MoyaNatalis_62 Start: 44704, Stop: 44862, Start Num: 19
Candidate Starts for MoyaNatalis_62:
(Start: 19 @44704 has 5 MA's), (Start: 23 @44713 has 4 MA's), (28, 44764), (29, 44776), (30, 44785), (35, 44854),

Gene: NathanVaag_42 Start: 34655, Stop: 34888, Start Num: 12
Candidate Starts for NathanVaag_42:
(4, 34481), (7, 34517), (8, 34520), (9, 34538), (Start: 12 @34655 has 19 MA's), (Start: 18 @34718 has 1 MA's), (32, 34865),

Gene: Nikan_60 Start: 41306, Stop: 41169, Start Num: 22
Candidate Starts for Nikan_60:
(Start: 22 @41306 has 1 MA's),

Gene: Piccoletto_42 Start: 34680, Stop: 34913, Start Num: 12
Candidate Starts for Piccoletto_42:
(2, 34461), (4, 34506), (7, 34542), (8, 34545), (9, 34563), (Start: 12 @34680 has 19 MA's), (Start: 18 @34743 has 1 MA's), (32, 34890),

Gene: Pippa_46 Start: 35371, Stop: 35607, Start Num: 12
Candidate Starts for Pippa_46:
(Start: 12 @35371 has 19 MA's), (14, 35398), (31, 35533), (32, 35584),

Gene: PrincessTrina_65 Start: 45399, Stop: 45572, Start Num: 17
Candidate Starts for PrincessTrina_65:
(Start: 17 @45399 has 12 MA's), (21, 45435), (26, 45450),

Gene: RosiePosie_61 Start: 44394, Stop: 44552, Start Num: 19
Candidate Starts for RosiePosie_61:
(Start: 19 @44394 has 5 MA's), (Start: 23 @44403 has 4 MA's), (28, 44454), (29, 44466), (30, 44475), (35, 44544),

Gene: Sonny_44 Start: 35004, Stop: 35237, Start Num: 12
Candidate Starts for Sonny_44:
(Start: 12 @35004 has 19 MA's), (Start: 18 @35067 has 1 MA's), (32, 35214),

Gene: StevieBAY_44 Start: 34997, Stop: 35182, Start Num: 12
Candidate Starts for StevieBAY_44:
(2, 34769), (Start: 12 @34997 has 19 MA's), (Start: 18 @35009 has 1 MA's), (32, 35159),

Gene: TaeYoung_44 Start: 34910, Stop: 35143, Start Num: 12
Candidate Starts for TaeYoung_44:
(Start: 12 @34910 has 19 MA's), (Start: 18 @34973 has 1 MA's), (32, 35120),

Gene: Timinator_44 Start: 34936, Stop: 35121, Start Num: 12
Candidate Starts for Timinator_44:
(2, 34708), (3, 34720), (Start: 12 @34936 has 19 MA's), (Start: 18 @34948 has 1 MA's), (32, 35098),

Gene: Tophat_65 Start: 45332, Stop: 45505, Start Num: 17
Candidate Starts for Tophat_65:
(Start: 17 @45332 has 12 MA's), (21, 45368), (26, 45383),

Gene: Zartrosa_44 Start: 34947, Stop: 35189, Start Num: 12
Candidate Starts for Zartrosa_44:
(4, 34761), (10, 34827), (11, 34845), (Start: 12 @34947 has 19 MA's), (30, 35112), (31, 35115), (32, 35166),