# Pham 85644

1: P107A_39 + 1
2: Enochoraptor_40 + 2
3: PHL071N05_39 + 6
4: ATCC29399BC_40 + 2
5: P106L_39 + 4
6: Leviosa_40
7: Lauchelly_40 + 2
8: P100A_40 + 4
9: PAS50_40 + 8
10: Attacne_40
11: DrParker_40 + 1
12: P14.4_40
13: PA6_40
14: Cota_40 + 2
15: Kubed_40
16: PHL037M02_39 + 2
17: P9.1_40
18: P1.1_40
19: MEAK_40
20: PHL010M04_39
21: BruceLethal_40
22: Solid_40

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 85644 Report

This analysis was run 04/28/24 on database version 559.

Pham number 85644 has 56 members, 14 are drafts.

Phages represented in each track:
• Track 1 : P107A_39, PHL112N00_39
• Track 2 : Enochoraptor_40, P108C_39, Rileysaurus_39
• Track 3 : PHL071N05_39, Enoki_40, Pirate_40, Keiki_40, P104B_39, Procrass1_40, P104A_40
• Track 4 : ATCC29399BC_40, P107C_39, ATCC29399BT_40
• Track 5 : P106L_39, P106I_39, P106M_39, P106A_39, P106C_40
• Track 6 : Leviosa_40
• Track 7 : Lauchelly_40, Ouroboros_40, SKKY_40
• Track 8 : P100A_40, Supernova_40, MrAK_40, P105_40, PHL060L00_39
• Track 9 : PAS50_40, Aquarius_40, PHL067M10_39, P100D_40, Moyashi_40, PAD20_40, PHL113M01_39, PHL111M01_39, Stormborn_40
• Track 10 : Attacne_40
• Track 11 : DrParker_40, P100.1_40
• Track 12 : P14.4_40
• Track 13 : PA6_40
• Track 14 : Cota_40, Wizzo_40, LilBandit_40
• Track 15 : Kubed_40
• Track 16 : PHL037M02_39, P101A_40, PHL114L00_39
• Track 17 : P9.1_40
• Track 18 : P1.1_40
• Track 19 : MEAK_40
• Track 20 : PHL010M04_39
• Track 21 : BruceLethal_40
• Track 22 : Solid_40

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

The start number called the most often in the published annotations is 8, it was called in 42 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ATCC29399BC_40, ATCC29399BT_40, Aquarius_40, Attacne_40, BruceLethal_40, Cota_40, DrParker_40, Enochoraptor_40, Enoki_40, Keiki_40, Kubed_40, Lauchelly_40, Leviosa_40, LilBandit_40, MEAK_40, Moyashi_40, MrAK_40,

Ouroboros_40, P1.1_40, P100.1_40, P100A_40, P100D_40, P101A_40, P104A_40, P104B_39, P105_40, P106A_39, P106C_40, P106I_39, P106L_39, P106M_39, P107A_39, P107C_39, P108C_39, P14.4_40, P9.1_40, PA6_40, PAD20_40, PAS50_40, PHL010M04_39, PHL037M02_39, PHL060L00_39, PHL067M10_39, PHL071N05_39, PHL111M01_39, PHL112N00_39, PHL113M01_39, PHL114L00_39, Pirate_40, Procrass1_40, Rileysaurus_39, SKKY_40, Solid_40, Stormborn_40, Supernova_40, Wizzo_40,

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

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

**Summary by start number:**

Start 8:
• Found in 56 of 56 ( 100.0% ) of genes in pham
• Manual Annotations of this start: 42 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ATCC29399BC_40 (BU), ATCC29399BT_40 (BU), Aquarius_40 (BU), Attacne_40 (BU), BruceLethal_40 (BU), Cota_40 (BU), DrParker_40 (BU), Enochoraptor_40 (BU), Enoki_40 (BU), Keiki_40 (BU), Kubed_40 (BU), Lauchelly_40 (BU), Leviosa_40 (BU), LilBandit_40 (BU), MEAK_40 (BU), Moyashi_40 (BU), MrAK_40 (BU), Ouroboros_40 (BU), P1.1_40 (BU), P100.1_40 (BU), P100A_40 (BU), P100D_40 (BU), P101A_40 (BU), P104A_40 (BU), P104B_39 (BU), P105_40 (BU), P106A_39 (BU), P106C_40 (BU), P106I_39 (BU), P106L_39 (BU), P106M_39 (BU), P107A_39 (BU), P107C_39 (BU), P108C_39 (BU), P14.4_40 (BU), P9.1_40 (BU), PA6_40 (BU), PAD20_40 (BU), PAS50_40 (BU), PHL010M04_39 (BU), PHL037M02_39 (BU), PHL060L00_39 (BU), PHL067M10_39 (BU), PHL071N05_39 (BU), PHL111M01_39 (BU), PHL112N00_39 (BU), PHL113M01_39 (BU), PHL114L00_39 (BU), Pirate_40 (BU), Procrass1_40 (BU), Rileysaurus_39 (BU), SKKY_40 (BU), Solid_40 (BU), Stormborn_40 (BU), Supernova_40 (BU), Wizzo_40 (BU),

**Summary by clusters:**

There is one cluster represented in this pham: BU

Info for manual annotations of cluster BU:
•Start number 8 was manually annotated 42 times for cluster BU.

***Gene Information:***

Gene: ATCC29399BC_40 Start: 25515, Stop: 25288, Start Num: 8
Candidate Starts for ATCC29399BC_40:
(3, 25728), (5, 25677), (Start: 8 @25515 has 42 MA's),

Gene: ATCC29399BT_40 Start: 25515, Stop: 25288, Start Num: 8
Candidate Starts for ATCC29399BT_40:
(3, 25728), (5, 25677), (Start: 8 @25515 has 42 MA's),

Gene: Aquarius_40 Start: 24978, Stop: 24751, Start Num: 8
Candidate Starts for Aquarius_40:
(Start: 8 @24978 has 42 MA's),

Gene: Attacne_40 Start: 25022, Stop: 24792, Start Num: 8
Candidate Starts for Attacne_40:
(3, 25241), (5, 25190), (Start: 8 @25022 has 42 MA's), (9, 25013),

Gene: BruceLethal_40 Start: 25540, Stop: 25313, Start Num: 8
Candidate Starts for BruceLethal_40:
(5, 25708), (Start: 8 @25540 has 42 MA's),

Gene: Cota_40 Start: 25578, Stop: 25351, Start Num: 8
Candidate Starts for Cota_40:
(Start: 8 @25578 has 42 MA's),

Gene: DrParker_40 Start: 25619, Stop: 25392, Start Num: 8
Candidate Starts for DrParker_40:
(4, 25826), (Start: 8 @25619 has 42 MA's),

Gene: Enochoraptor_40 Start: 25560, Stop: 25333, Start Num: 8
Candidate Starts for Enochoraptor_40:
(2, 25812), (3, 25779), (Start: 8 @25560 has 42 MA's),

Gene: Enoki_40 Start: 25564, Stop: 25337, Start Num: 8
Candidate Starts for Enoki_40:
(3, 25783), (Start: 8 @25564 has 42 MA's),

Gene: Keiki_40 Start: 25493, Stop: 25266, Start Num: 8
Candidate Starts for Keiki_40:
(3, 25712), (Start: 8 @25493 has 42 MA's),

Gene: Kubed_40 Start: 25548, Stop: 25321, Start Num: 8
Candidate Starts for Kubed_40:
(4, 25767), (Start: 8 @25548 has 42 MA's),

Gene: Lauchelly_40 Start: 25597, Stop: 25370, Start Num: 8
Candidate Starts for Lauchelly_40:
(Start: 8 @25597 has 42 MA's),

Gene: Leviosa_40 Start: 25566, Stop: 25339, Start Num: 8
Candidate Starts for Leviosa_40:
(7, 25620), (Start: 8 @25566 has 42 MA's), (9, 25557), (10, 25545), (12, 25518),

Gene: LilBandit_40 Start: 25379, Stop: 25152, Start Num: 8
Candidate Starts for LilBandit_40:
(Start: 8 @25379 has 42 MA's),

Gene: MEAK_40 Start: 25247, Stop: 25020, Start Num: 8
Candidate Starts for MEAK_40:
(6, 25364), (Start: 8 @25247 has 42 MA's),

Gene: Moyashi_40 Start: 25350, Stop: 25123, Start Num: 8
Candidate Starts for Moyashi_40:
(Start: 8 @25350 has 42 MA's),

Gene: MrAK_40 Start: 25361, Stop: 25134, Start Num: 8
Candidate Starts for MrAK_40:
(3, 25580), (5, 25529), (Start: 8 @25361 has 42 MA's),

Gene: Ouroboros_40 Start: 25567, Stop: 25340, Start Num: 8
Candidate Starts for Ouroboros_40:
(Start: 8 @25567 has 42 MA's),

Gene: P1.1_40 Start: 25595, Stop: 25368, Start Num: 8
Candidate Starts for P1.1_40:
(5, 25766), (Start: 8 @25595 has 42 MA's),

Gene: P100.1_40 Start: 25639, Stop: 25412, Start Num: 8
Candidate Starts for P100.1_40:
(4, 25846), (Start: 8 @25639 has 42 MA's),

Gene: P100A_40 Start: 25571, Stop: 25344, Start Num: 8
Candidate Starts for P100A_40:
(3, 25790), (5, 25739), (Start: 8 @25571 has 42 MA's),

Gene: P100D_40 Start: 25550, Stop: 25323, Start Num: 8
Candidate Starts for P100D_40:
(Start: 8 @25550 has 42 MA's),

Gene: P101A_40 Start: 25586, Stop: 25359, Start Num: 8
Candidate Starts for P101A_40:
(Start: 8 @25586 has 42 MA's),

Gene: P104A_40 Start: 25347, Stop: 25120, Start Num: 8
Candidate Starts for P104A_40:
(3, 25566), (Start: 8 @25347 has 42 MA's),

Gene: P104B_39 Start: 25551, Stop: 25324, Start Num: 8
Candidate Starts for P104B_39:
(3, 25770), (Start: 8 @25551 has 42 MA's),

Gene: P105_40 Start: 25229, Stop: 25002, Start Num: 8
Candidate Starts for P105_40:
(3, 25448), (5, 25397), (Start: 8 @25229 has 42 MA's),

Gene: P106A_39 Start: 25656, Stop: 25429, Start Num: 8
Candidate Starts for P106A_39:
(Start: 8 @25656 has 42 MA's),

Gene: P106C_40 Start: 25572, Stop: 25345, Start Num: 8
Candidate Starts for P106C_40:
(Start: 8 @25572 has 42 MA's),

Gene: P106I_39 Start: 25401, Stop: 25174, Start Num: 8

Candidate Starts for P106I_39:
(Start: 8 @25401 has 42 MA's),

Gene: P106L_39 Start: 25572, Stop: 25345, Start Num: 8
Candidate Starts for P106L_39:
(Start: 8 @25572 has 42 MA's),

Gene: P106M_39 Start: 25572, Stop: 25345, Start Num: 8
Candidate Starts for P106M_39:
(Start: 8 @25572 has 42 MA's),

Gene: P107A_39 Start: 25590, Stop: 25363, Start Num: 8
Candidate Starts for P107A_39:
(5, 25752), (Start: 8 @25590 has 42 MA's),

Gene: P107C_39 Start: 25515, Stop: 25288, Start Num: 8
Candidate Starts for P107C_39:
(3, 25728), (5, 25677), (Start: 8 @25515 has 42 MA's),

Gene: P108C_39 Start: 25553, Stop: 25326, Start Num: 8
Candidate Starts for P108C_39:
(2, 25805), (3, 25772), (Start: 8 @25553 has 42 MA's),

Gene: P14.4_40 Start: 25567, Stop: 25337, Start Num: 8
Candidate Starts for P14.4_40:
(3, 25786), (5, 25735), (Start: 8 @25567 has 42 MA's), (9, 25558), (13, 25381),

Gene: P9.1_40 Start: 25591, Stop: 25364, Start Num: 8
Candidate Starts for P9.1_40:
(1, 25849), (4, 25804), (Start: 8 @25591 has 42 MA's),

Gene: PA6_40 Start: 25558, Stop: 25331, Start Num: 8
Candidate Starts for PA6_40:
(Start: 8 @25558 has 42 MA's), (9, 25549), (11, 25513),

Gene: PAD20_40 Start: 25318, Stop: 25091, Start Num: 8
Candidate Starts for PAD20_40:
(Start: 8 @25318 has 42 MA's),

Gene: PAS50_40 Start: 25566, Stop: 25339, Start Num: 8
Candidate Starts for PAS50_40:
(Start: 8 @25566 has 42 MA's),

Gene: PHL010M04_39 Start: 25553, Stop: 25326, Start Num: 8
Candidate Starts for PHL010M04_39:
(7, 25607), (Start: 8 @25553 has 42 MA's),

Gene: PHL037M02_39 Start: 25552, Stop: 25325, Start Num: 8
Candidate Starts for PHL037M02_39:
(Start: 8 @25552 has 42 MA's),

Gene: PHL060L00_39 Start: 25395, Stop: 25168, Start Num: 8
Candidate Starts for PHL060L00_39:

(3, 25614), (5, 25563), (Start: 8 @25395 has 42 MA's),

Gene: PHL067M10_39 Start: 25517, Stop: 25290, Start Num: 8
Candidate Starts for PHL067M10_39:
(Start: 8 @25517 has 42 MA's),

Gene: PHL071N05_39 Start: 25582, Stop: 25355, Start Num: 8
Candidate Starts for PHL071N05_39:
(3, 25801), (Start: 8 @25582 has 42 MA's),

Gene: PHL111M01_39 Start: 25279, Stop: 25052, Start Num: 8
Candidate Starts for PHL111M01_39:
(Start: 8 @25279 has 42 MA's),

Gene: PHL112N00_39 Start: 25571, Stop: 25344, Start Num: 8
Candidate Starts for PHL112N00_39:
(5, 25733), (Start: 8 @25571 has 42 MA's),

Gene: PHL113M01_39 Start: 25323, Stop: 25096, Start Num: 8
Candidate Starts for PHL113M01_39:
(Start: 8 @25323 has 42 MA's),

Gene: PHL114L00_39 Start: 25509, Stop: 25282, Start Num: 8
Candidate Starts for PHL114L00_39:
(Start: 8 @25509 has 42 MA's),

Gene: Pirate_40 Start: 25478, Stop: 25251, Start Num: 8
Candidate Starts for Pirate_40:
(3, 25697), (Start: 8 @25478 has 42 MA's),

Gene: Procrass1_40 Start: 25505, Stop: 25278, Start Num: 8
Candidate Starts for Procrass1_40:
(3, 25724), (Start: 8 @25505 has 42 MA's),

Gene: Rileysaurus_39 Start: 25576, Stop: 25349, Start Num: 8
Candidate Starts for Rileysaurus_39:
(2, 25828), (3, 25795), (Start: 8 @25576 has 42 MA's),

Gene: SKKY_40 Start: 25310, Stop: 25083, Start Num: 8
Candidate Starts for SKKY_40:
(Start: 8 @25310 has 42 MA's),

Gene: Solid_40 Start: 25553, Stop: 25326, Start Num: 8
Candidate Starts for Solid_40:
(Start: 8 @25553 has 42 MA's),

Gene: Stormborn_40 Start: 25172, Stop: 24945, Start Num: 8
Candidate Starts for Stormborn_40:
(Start: 8 @25172 has 42 MA's),

Gene: Supernova_40 Start: 25305, Stop: 25078, Start Num: 8
Candidate Starts for Supernova_40:
(3, 25524), (5, 25473), (Start: 8 @25305 has 42 MA's),

Gene: Wizzo_40 Start: 25038, Stop: 24811, Start Num: 8
Candidate Starts for Wizzo_40:
(Start: 8 @25038 has 42 MA's),