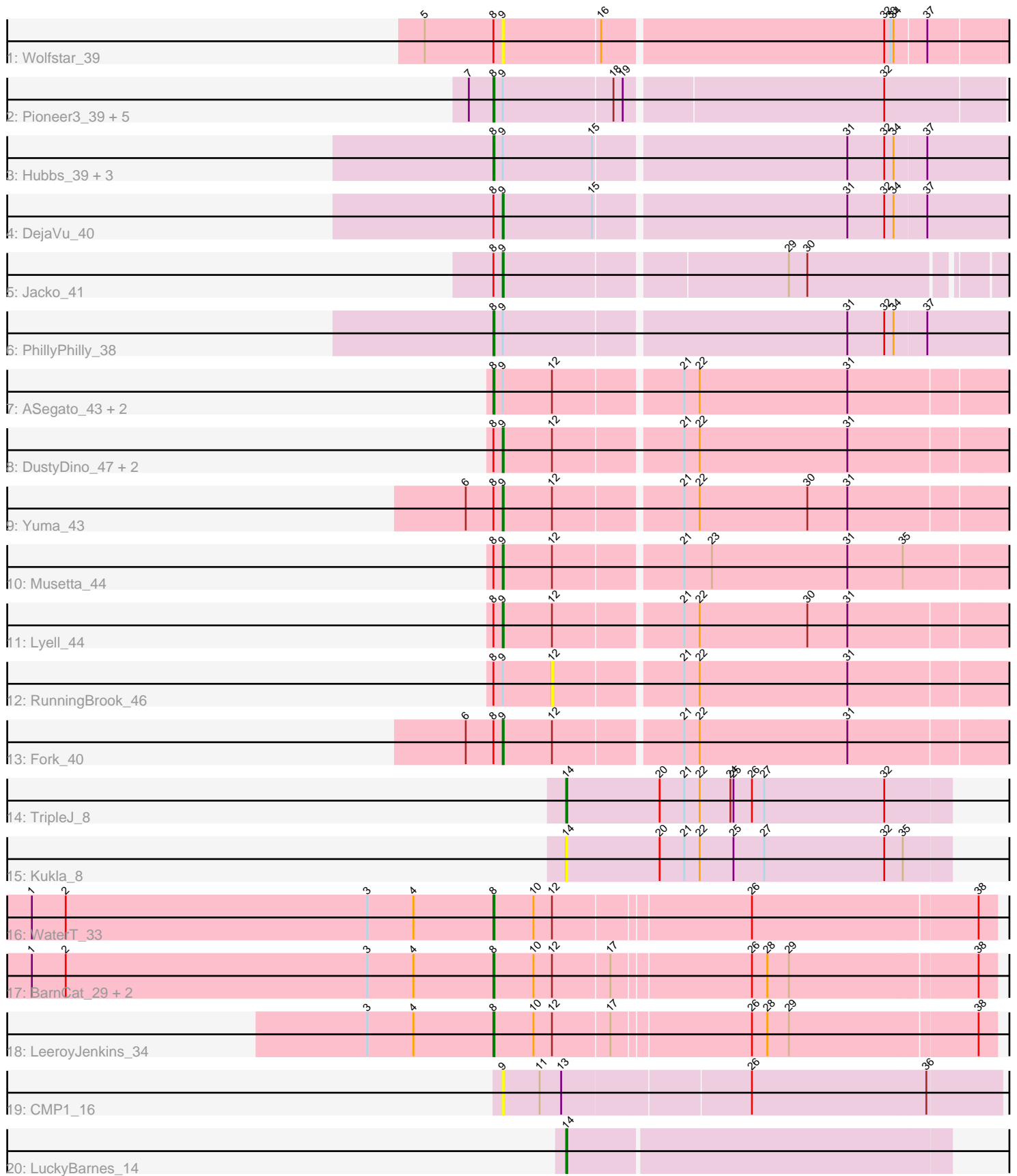


Pham 153347



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 153347 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 153347 has 34 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar_39
- Track 2 : Pioneer3_39, Hortus1_39, OlinDD_39, Platte_39, Tandem_39, Alleb_40
- Track 3 : Hubbs_39, Roman_39, Lupine_37, Pavlo_37
- Track 4 : DejaVu_40
- Track 5 : Jacko_41
- Track 6 : PhillyPhilly_38
- Track 7 : ASegato_43, Erenyeager_44, StevieWelch_44
- Track 8 : DustyDino_47, Welcome_45, Necrophoxinus_46
- Track 9 : Yuma_43
- Track 10 : Musetta_44
- Track 11 : Lyell_44
- Track 12 : RunningBrook_46
- Track 13 : Fork_40
- Track 14 : TripleJ_8
- Track 15 : Kukla_8
- Track 16 : WaterT_33
- Track 17 : BarnCat_29, Lifes_30, Cassita_34
- Track 18 : LeeroyJenkins_34
- Track 19 : CMP1_16
- Track 20 : LuckyBarnes_14

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 17 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato_43, Alleb_40, BarnCat_29, Cassita_34, Erenyeager_44, Hortus1_39, Hubbs_39, LeeroyJenkins_34, Lifes_30, Lupine_37, OlinDD_39, Pavlo_37, PhillyPhilly_38, Pioneer3_39, Platte_39, Roman_39, StevieWelch_44, Tandem_39,

WaterT_33,

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

- DejaVu_40, DustyDino_47, Fork_40, Jacko_41, Lyell_44, Musetta_44, Necrophoxinus_46, RunningBrook_46, Welcome_45, Wolfstar_39, Yuma_43,

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

- CMP1_16, Kukla_8, LuckyBarnes_14, TripleJ_8,

Summary by start number:

Start 8:

- Found in 30 of 34 (88.2%) of genes in pham
- Manual Annotations of this start: 17 of 28
- Called 63.3% of time when present
- Phage (with cluster) where this start called: ASegato_43 (ED2), Alleb_40 (ED1), BarnCat_29 (GB), Cassita_34 (GB), Erenyeager_44 (ED2), Hortus1_39 (ED1), Hubbs_39 (ED1), LeeroyJenkins_34 (GB), Lifes_30 (GB), Lupine_37 (ED1), OlinDD_39 (ED1), Pavlo_37 (ED1), PhillyPhilly_38 (ED1), Pioneer3_39 (ED1), Platte_39 (ED1), Roman_39 (ED1), StevieWelch_44 (ED2), Tandem_39 (ED1), WaterT_33 (GB),

Start 9:

- Found in 26 of 34 (76.5%) of genes in pham
- Manual Annotations of this start: 9 of 28
- Called 42.3% of time when present
- Phage (with cluster) where this start called: CMP1_16 (singleton), DejaVu_40 (ED1), DustyDino_47 (ED2), Fork_40 (ED2), Jacko_41 (ED1), Lyell_44 (ED2), Musetta_44 (ED2), Necrophoxinus_46 (ED2), Welcome_45 (ED2), Wolfstar_39 (ED), Yuma_43 (ED2),

Start 12:

- Found in 16 of 34 (47.1%) of genes in pham
- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: RunningBrook_46 (ED2),

Start 14:

- Found in 3 of 34 (8.8%) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kukla_8 (FJ), LuckyBarnes_14 (singleton), TripleJ_8 (FJ),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, ED, ED2, ED1, GB, FJ,

Info for manual annotations of cluster ED1:

- Start number 8 was manually annotated 11 times for cluster ED1.
- Start number 9 was manually annotated 2 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 8 was manually annotated 2 times for cluster ED2.
- Start number 9 was manually annotated 7 times for cluster ED2.

Info for manual annotations of cluster FJ:

- Start number 14 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster GB:

- Start number 8 was manually annotated 4 times for cluster GB.

Gene Information:

Gene: ASegato_43 Start: 19037, Stop: 19561, Start Num: 8

Candidate Starts for ASegato_43:

(Start: 8 @19037 has 17 MA's), (Start: 9 @19046 has 9 MA's), (12, 19094), (21, 19211), (22, 19226), (31, 19370),

Gene: Alleb_40 Start: 20983, Stop: 21459, Start Num: 8

Candidate Starts for Alleb_40:

(7, 20959), (Start: 8 @20983 has 17 MA's), (Start: 9 @20992 has 9 MA's), (18, 21097), (19, 21106), (32, 21349),

Gene: BarnCat_29 Start: 15320, Stop: 15790, Start Num: 8

Candidate Starts for BarnCat_29:

(1, 14870), (2, 14903), (3, 15197), (4, 15242), (Start: 8 @15320 has 17 MA's), (10, 15359), (12, 15377), (17, 15431), (26, 15560), (28, 15575), (29, 15596), (38, 15773),

Gene: CMP1_16 Start: 13130, Stop: 13603, Start Num: 9

Candidate Starts for CMP1_16:

(Start: 9 @13130 has 9 MA's), (11, 13166), (13, 13187), (26, 13364), (36, 13532),

Gene: Cassita_34 Start: 17696, Stop: 18166, Start Num: 8

Candidate Starts for Cassita_34:

(1, 17246), (2, 17279), (3, 17573), (4, 17618), (Start: 8 @17696 has 17 MA's), (10, 17735), (12, 17753), (17, 17807), (26, 17936), (28, 17951), (29, 17972), (38, 18149),

Gene: DejaVu_40 Start: 18319, Stop: 18810, Start Num: 9

Candidate Starts for DejaVu_40:

(Start: 8 @18310 has 17 MA's), (Start: 9 @18319 has 9 MA's), (15, 18406), (31, 18643), (32, 18679), (34, 18688), (37, 18718),

Gene: DustyDino_47 Start: 19985, Stop: 20500, Start Num: 9

Candidate Starts for DustyDino_47:

(Start: 8 @19976 has 17 MA's), (Start: 9 @19985 has 9 MA's), (12, 20033), (21, 20150), (22, 20165), (31, 20309),

Gene: Erenyeager_44 Start: 19371, Stop: 19895, Start Num: 8

Candidate Starts for Erenyeager_44:

(Start: 8 @19371 has 17 MA's), (Start: 9 @19380 has 9 MA's), (12, 19428), (21, 19545), (22, 19560), (31, 19704),

Gene: Fork_40 Start: 18695, Stop: 19210, Start Num: 9

Candidate Starts for Fork_40:

(6, 18659), (Start: 8 @18686 has 17 MA's), (Start: 9 @18695 has 9 MA's), (12, 18743), (21, 18860), (22, 18875), (31, 19019),

Gene: Hortus1_39 Start: 20973, Stop: 21449, Start Num: 8

Candidate Starts for Hortus1_39:

(7, 20949), (Start: 8 @20973 has 17 MA's), (Start: 9 @20982 has 9 MA's), (18, 21087), (19, 21096), (32, 21339),

Gene: Hubbs_39 Start: 18522, Stop: 19022, Start Num: 8

Candidate Starts for Hubbs_39:

(Start: 8 @18522 has 17 MA's), (Start: 9 @18531 has 9 MA's), (15, 18618), (31, 18855), (32, 18891), (34, 18900), (37, 18930),

Gene: Jacko_41 Start: 19168, Stop: 19641, Start Num: 9

Candidate Starts for Jacko_41:

(Start: 8 @19159 has 17 MA's), (Start: 9 @19168 has 9 MA's), (29, 19432), (30, 19450),

Gene: Kukla_8 Start: 6781, Stop: 7152, Start Num: 14

Candidate Starts for Kukla_8:

(Start: 14 @6781 has 2 MA's), (20, 6871), (21, 6895), (22, 6910), (25, 6943), (27, 6973), (32, 7090), (35, 7108),

Gene: LeeroyJenkins_34 Start: 17627, Stop: 18097, Start Num: 8

Candidate Starts for LeeroyJenkins_34:

(3, 17504), (4, 17549), (Start: 8 @17627 has 17 MA's), (10, 17666), (12, 17684), (17, 17738), (26, 17867), (28, 17882), (29, 17903), (38, 18080),

Gene: Lifes_30 Start: 15351, Stop: 15821, Start Num: 8

Candidate Starts for Lifes_30:

(1, 14901), (2, 14934), (3, 15228), (4, 15273), (Start: 8 @15351 has 17 MA's), (10, 15390), (12, 15408), (17, 15462), (26, 15591), (28, 15606), (29, 15627), (38, 15804),

Gene: LuckyBarnes_14 Start: 9588, Stop: 9953, Start Num: 14

Candidate Starts for LuckyBarnes_14:

(Start: 14 @9588 has 2 MA's),

Gene: Lupine_37 Start: 17723, Stop: 18223, Start Num: 8

Candidate Starts for Lupine_37:

(Start: 8 @17723 has 17 MA's), (Start: 9 @17732 has 9 MA's), (15, 17819), (31, 18056), (32, 18092), (34, 18101), (37, 18131),

Gene: Lyell_44 Start: 19299, Stop: 19814, Start Num: 9

Candidate Starts for Lyell_44:

(Start: 8 @19290 has 17 MA's), (Start: 9 @19299 has 9 MA's), (12, 19347), (21, 19464), (22, 19479), (30, 19584), (31, 19623),

Gene: Musetta_44 Start: 19414, Stop: 19932, Start Num: 9

Candidate Starts for Musetta_44:

(Start: 8 @19405 has 17 MA's), (Start: 9 @19414 has 9 MA's), (12, 19462), (21, 19579), (23, 19606), (31, 19738), (35, 19792),

Gene: Necrophoxinus_46 Start: 19993, Stop: 20508, Start Num: 9
Candidate Starts for Necrophoxinus_46:
(Start: 8 @19984 has 17 MA's), (Start: 9 @19993 has 9 MA's), (12, 20041), (21, 20158), (22, 20173),
(31, 20317),

Gene: OlinDD_39 Start: 20972, Stop: 21448, Start Num: 8
Candidate Starts for OlinDD_39:
(7, 20948), (Start: 8 @20972 has 17 MA's), (Start: 9 @20981 has 9 MA's), (18, 21086), (19, 21095),
(32, 21338),

Gene: Pavlo_37 Start: 18001, Stop: 18501, Start Num: 8
Candidate Starts for Pavlo_37:
(Start: 8 @18001 has 17 MA's), (Start: 9 @18010 has 9 MA's), (15, 18097), (31, 18334), (32, 18370),
(34, 18379), (37, 18409),

Gene: PhillyPhilly_38 Start: 17903, Stop: 18403, Start Num: 8
Candidate Starts for PhillyPhilly_38:
(Start: 8 @17903 has 17 MA's), (Start: 9 @17912 has 9 MA's), (31, 18236), (32, 18272), (34, 18281),
(37, 18311),

Gene: Pioneer3_39 Start: 20980, Stop: 21456, Start Num: 8
Candidate Starts for Pioneer3_39:
(7, 20956), (Start: 8 @20980 has 17 MA's), (Start: 9 @20989 has 9 MA's), (18, 21094), (19, 21103),
(32, 21346),

Gene: Platte_39 Start: 20765, Stop: 21241, Start Num: 8
Candidate Starts for Platte_39:
(7, 20741), (Start: 8 @20765 has 17 MA's), (Start: 9 @20774 has 9 MA's), (18, 20879), (19, 20888),
(32, 21131),

Gene: Roman_39 Start: 18369, Stop: 18869, Start Num: 8
Candidate Starts for Roman_39:
(Start: 8 @18369 has 17 MA's), (Start: 9 @18378 has 9 MA's), (15, 18465), (31, 18702), (32, 18738),
(34, 18747), (37, 18777),

Gene: RunningBrook_46 Start: 20033, Stop: 20500, Start Num: 12
Candidate Starts for RunningBrook_46:
(Start: 8 @19976 has 17 MA's), (Start: 9 @19985 has 9 MA's), (12, 20033), (21, 20150), (22, 20165),
(31, 20309),

Gene: StevieWelch_44 Start: 19376, Stop: 19900, Start Num: 8
Candidate Starts for StevieWelch_44:
(Start: 8 @19376 has 17 MA's), (Start: 9 @19385 has 9 MA's), (12, 19433), (21, 19550), (22, 19565),
(31, 19709),

Gene: Tandem_39 Start: 20919, Stop: 21395, Start Num: 8
Candidate Starts for Tandem_39:
(7, 20895), (Start: 8 @20919 has 17 MA's), (Start: 9 @20928 has 9 MA's), (18, 21033), (19, 21042),
(32, 21285),

Gene: TripleJ_8 Start: 7069, Stop: 7440, Start Num: 14
Candidate Starts for TripleJ_8:

(Start: 14 @7069 has 2 MA's), (20, 7159), (21, 7183), (22, 7198), (24, 7228), (25, 7231), (26, 7249), (27, 7261), (32, 7378),

Gene: WaterT_33 Start: 17440, Stop: 17910, Start Num: 8

Candidate Starts for WaterT_33:

(1, 16990), (2, 17023), (3, 17317), (4, 17362), (Start: 8 @17440 has 17 MA's), (10, 17479), (12, 17497), (26, 17680), (38, 17893),

Gene: Welcome_45 Start: 19402, Stop: 19917, Start Num: 9

Candidate Starts for Welcome_45:

(Start: 8 @19393 has 17 MA's), (Start: 9 @19402 has 9 MA's), (12, 19450), (21, 19567), (22, 19582), (31, 19726),

Gene: Wolfstar_39 Start: 18320, Stop: 18826, Start Num: 9

Candidate Starts for Wolfstar_39:

(5, 18245), (Start: 8 @18311 has 17 MA's), (Start: 9 @18320 has 9 MA's), (16, 18413), (32, 18680), (33, 18686), (34, 18689), (37, 18719),

Gene: Yuma_43 Start: 19313, Stop: 19828, Start Num: 9

Candidate Starts for Yuma_43:

(6, 19277), (Start: 8 @19304 has 17 MA's), (Start: 9 @19313 has 9 MA's), (12, 19361), (21, 19478), (22, 19493), (30, 19598), (31, 19637),