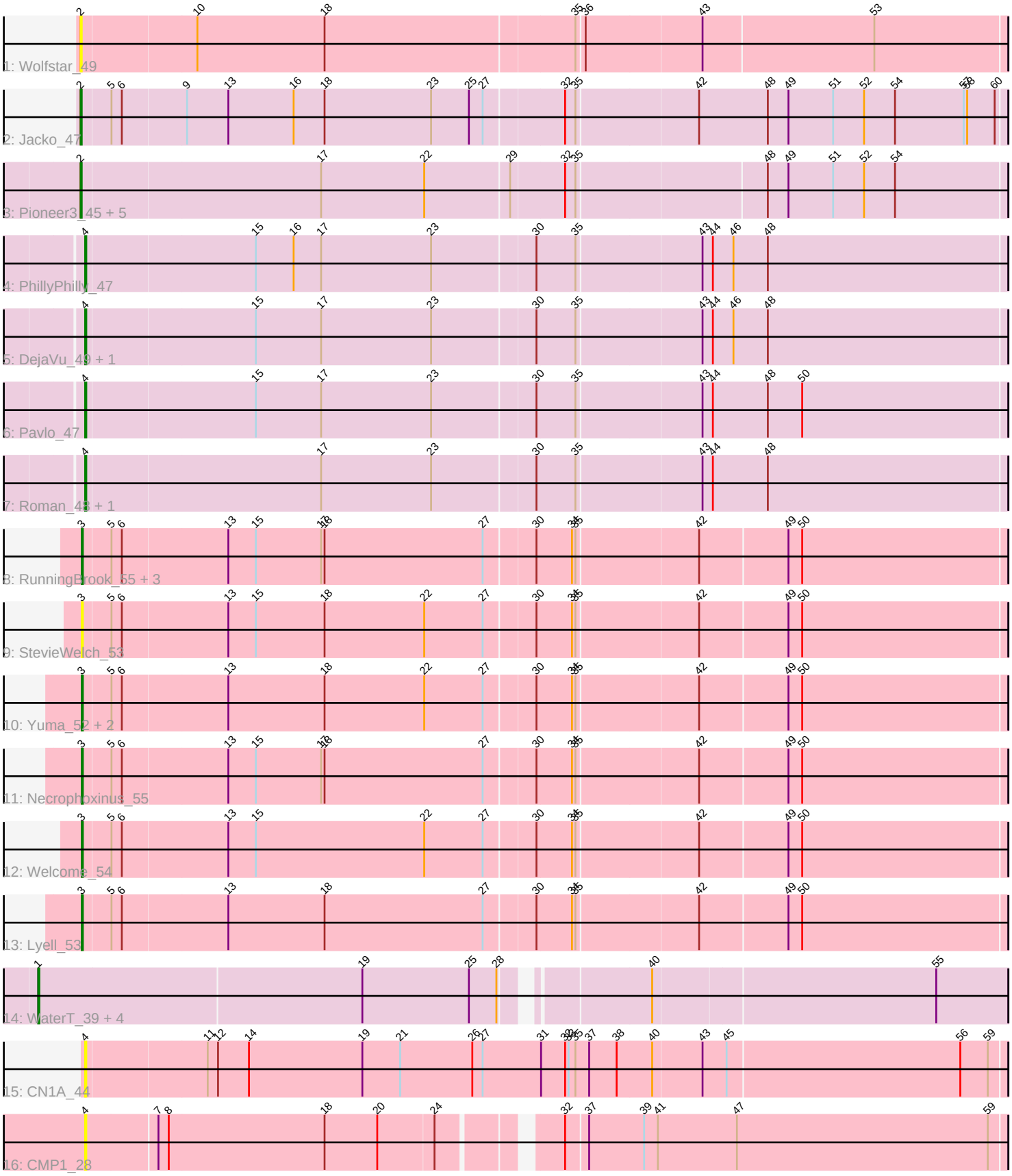
Pham 86159


1: Wolfstar_49
2: Jacko_47
3: Pioneer3_45 + 5
4: PhillyPhilly_47
5: DejaVu_49 + 1
6: Pavlo_47
7: Roman_48 + 1
8: RunningBrook_55 + 3
9: StevieWelch_53
10: Yuma_52 + 2
11: Necrophoxinus_55
12: Welcome_54
13: Lyell_53
14: WaterT_39 + 4
15: CN1A_44
16: CMP1_28

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 86159 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 86159 has 32 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Wolfstar_49
• Track 2 : Jacko_47
• Track 3 : Pioneer3_45, Tandem_45, Platte_45, Hortus1_45, Alleb_46, OlinDD_45
• Track 4 : PhillyPhilly_47
• Track 5 : DejaVu_49, Hubbs_48
• Track 6 : Pavlo_47
• Track 7 : Roman_48, Lupine_46
• Track 8 : RunningBrook_55, Musetta_53, ASegato_52, DustyDino_56
• Track 9 : StevieWelch_53
• Track 10 : Yuma_52, Fork_49, Erenyeager_53
• Track 11 : Necrophoxinus_55
• Track 12 : Welcome_54
• Track 13 : Lyell_53
• Track 14 : WaterT_39, BarnCat_35, Cassita_40, Lifes_36, LeeroyJenkins_40
• Track 15 : CN1A_44
• Track 16 : CMP1_28

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

The start number called the most often in the published annotations is 3, it was called in 9 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ASegato_52, DustyDino_56, Erenyeager_53, Fork_49, Lyell_53, Musetta_53, Necrophoxinus_55, RunningBrook_55, StevieWelch_53, Welcome_54, Yuma_52,

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

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

• Alleb_46, BarnCat_35, CMP1_28, CN1A_44, Cassita_40, DejaVu_49, Hortus1_45, Hubbs_48, Jacko_47, LeeroyJenkins_40, Lifes_36, Lupine_46, OlinDD_45, Pavlo_47, PhillyPhilly_47, Pioneer3_45, Platte_45, Roman_48, Tandem_45, WaterT_39, Wolfstar_49,

Summary by start number:

Start 1:
• Found in 5 of 32 (15.6%) of genes in pham
• Manual Annotations of this start: 4 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BarnCat_35 (GB), Cassita_40 (GB), LeeroyJenkins_40 (GB), Lifes_36 (GB), WaterT_39 (GB),

Start 2:
• Found in 8 of 32 (25.0%) of genes in pham
• Manual Annotations of this start: 7 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alleb_46 (ED1), Hortus1_45 (ED1), Jacko_47 (ED1), OlinDD_45 (ED1), Pioneer3_45 (ED1), Platte_45 (ED1), Tandem_45 (ED1), Wolfstar_49 (ED),

Start 3:
• Found in 11 of 32 (34.4%) of genes in pham
• Manual Annotations of this start: 9 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ASegato_52 (ED2), DustyDino_56 (ED2), Erenyeager_53 (ED2), Fork_49 (ED2), Lyell_53 (ED2), Musetta_53 (ED2), Necrophoxinus_55 (ED2), RunningBrook_55 (ED2), StevieWelch_53 (ED2), Welcome_54 (ED2), Yuma_52 (ED2),

Start 4:
• Found in 8 of 32 (25.0%) of genes in pham
• Manual Annotations of this start: 6 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CMP1_28 (singleton), CN1A_44 (singleton), DejaVu_49 (ED1), Hubbs_48 (ED1), Lupine_46 (ED1), Pavlo_47 (ED1), PhillyPhilly_47 (ED1), Roman_48 (ED1),

Summary by clusters:

There are 5 clusters represented in this pham: ED2, ED, singleton, ED1, GB,

Info for manual annotations of cluster ED1:
•Start number 2 was manually annotated 7 times for cluster ED1.
•Start number 4 was manually annotated 6 times for cluster ED1.

Info for manual annotations of cluster ED2:
•Start number 3 was manually annotated 9 times for cluster ED2.

Info for manual annotations of cluster GB:
•Start number 1 was manually annotated 4 times for cluster GB.

Gene Information:

Gene: ASegato_52 Start: 24560, Stop: 25345, Start Num: 3
Candidate Starts for ASegato_52:
(Start: 3 @24560 has 9 MA's), (5, 24584), (6, 24593), (13, 24683), (15, 24707), (17, 24764), (18, 24767), (27, 24905), (30, 24947), (34, 24977), (35, 24980), (42, 25082), (49, 25157), (50, 25169),

Gene: Alleb_46 Start: 23620, Stop: 24405, Start Num: 2
Candidate Starts for Alleb_46:
(Start: 2 @23620 has 7 MA's), (17, 23824), (22, 23914), (29, 23986), (32, 24031), (35, 24040), (48, 24199), (49, 24217), (51, 24256), (52, 24283), (54, 24310),

Gene: BarnCat_35 Start: 17871, Stop: 18677, Start Num: 1
Candidate Starts for BarnCat_35:
(Start: 1 @17871 has 4 MA's), (19, 18150), (25, 18243), (28, 18267), (40, 18375), (55, 18615),

Gene: CMP1_28 Start: 23145, Stop: 23909, Start Num: 4
Candidate Starts for CMP1_28:
(Start: 4 @23145 has 6 MA's), (7, 23205), (8, 23214), (18, 23349), (20, 23394), (24, 23442), (32, 23529), (37, 23547), (39, 23595), (41, 23607), (47, 23676), (59, 23895),

Gene: CN1A_44 Start: 32879, Stop: 32088, Start Num: 4
Candidate Starts for CN1A_44:
(Start: 4 @32879 has 6 MA's), (11, 32777), (12, 32768), (14, 32741), (19, 32642), (21, 32609), (26, 32546), (27, 32537), (31, 32486), (32, 32465), (33, 32462), (35, 32456), (37, 32444), (38, 32420), (40, 32390), (43, 32348), (45, 32327), (56, 32126), (59, 32102),

Gene: Cassita_40 Start: 20247, Stop: 21053, Start Num: 1
Candidate Starts for Cassita_40:
(Start: 1 @20247 has 4 MA's), (19, 20526), (25, 20619), (28, 20643), (40, 20751), (55, 20991),

Gene: DejaVu_49 Start: 23829, Stop: 24614, Start Num: 4
Candidate Starts for DejaVu_49:
(Start: 4 @23829 has 6 MA's), (15, 23973), (17, 24030), (23, 24126), (30, 24213), (35, 24246), (43, 24351), (44, 24360), (46, 24378), (48, 24408),

Gene: DustyDino_56 Start: 25504, Stop: 26289, Start Num: 3
Candidate Starts for DustyDino_56:
(Start: 3 @25504 has 9 MA's), (5, 25528), (6, 25537), (13, 25627), (15, 25651), (17, 25708), (18, 25711), (27, 25849), (30, 25891), (34, 25921), (35, 25924), (42, 26026), (49, 26101), (50, 26113),

Gene: Erenyeager_53 Start: 24896, Stop: 25681, Start Num: 3
Candidate Starts for Erenyeager_53:
(Start: 3 @24896 has 9 MA's), (5, 24920), (6, 24929), (13, 25019), (18, 25103), (22, 25190), (27, 25241), (30, 25283), (34, 25313), (35, 25316), (42, 25418), (49, 25493), (50, 25505),

Gene: Fork_49 Start: 24211, Stop: 24996, Start Num: 3
Candidate Starts for Fork_49:
(Start: 3 @24211 has 9 MA's), (5, 24235), (6, 24244), (13, 24334), (18, 24418), (22, 24505), (27, 24556), (30, 24598), (34, 24628), (35, 24631), (42, 24733), (49, 24808), (50, 24820),

Gene: Hortus1_45 Start: 23610, Stop: 24395, Start Num: 2
Candidate Starts for Hortus1_45:
(Start: 2 @23610 has 7 MA's), (17, 23814), (22, 23904), (29, 23976), (32, 24021), (35, 24030), (48, 24189), (49, 24207), (51, 24246), (52, 24273), (54, 24300),

Gene: Hubbs_48 Start: 24041, Stop: 24826, Start Num: 4
Candidate Starts for Hubbs_48:
(Start: 4 @24041 has 6 MA's), (15, 24185), (17, 24242), (23, 24338), (30, 24425), (35, 24458), (43, 24563), (44, 24572), (46, 24590), (48, 24620),

Gene: Jacko_47 Start: 21805, Stop: 22593, Start Num: 2
Candidate Starts for Jacko_47:
(Start: 2 @21805 has 7 MA's), (5, 21829), (6, 21838), (9, 21892), (13, 21928), (16, 21985), (18, 22012), (23, 22105), (25, 22138), (27, 22150), (32, 22216), (35, 22225), (42, 22327), (48, 22387), (49, 22405), (51, 22444), (52, 22471), (54, 22498), (57, 22558), (58, 22561), (60, 22585),

Gene: LeeroyJenkins_40 Start: 20178, Stop: 20984, Start Num: 1
Candidate Starts for LeeroyJenkins_40:
(Start: 1 @20178 has 4 MA's), (19, 20457), (25, 20550), (28, 20574), (40, 20682), (55, 20922),

Gene: Lifes_36 Start: 17902, Stop: 18708, Start Num: 1
Candidate Starts for Lifes_36:
(Start: 1 @17902 has 4 MA's), (19, 18181), (25, 18274), (28, 18298), (40, 18406), (55, 18646),

Gene: Lupine_46 Start: 23243, Stop: 24028, Start Num: 4
Candidate Starts for Lupine_46:
(Start: 4 @23243 has 6 MA's), (17, 23444), (23, 23540), (30, 23627), (35, 23660), (43, 23765), (44, 23774), (48, 23822),

Gene: Lyell_53 Start: 24815, Stop: 25600, Start Num: 3
Candidate Starts for Lyell_53:
(Start: 3 @24815 has 9 MA's), (5, 24839), (6, 24848), (13, 24938), (18, 25022), (27, 25160), (30, 25202), (34, 25232), (35, 25235), (42, 25337), (49, 25412), (50, 25424),

Gene: Musetta_53 Start: 24931, Stop: 25716, Start Num: 3
Candidate Starts for Musetta_53:
(Start: 3 @24931 has 9 MA's), (5, 24955), (6, 24964), (13, 25054), (15, 25078), (17, 25135), (18, 25138), (27, 25276), (30, 25318), (34, 25348), (35, 25351), (42, 25453), (49, 25528), (50, 25540),

Gene: Necrophoxinus_55 Start: 25510, Stop: 26295, Start Num: 3
Candidate Starts for Necrophoxinus_55:
(Start: 3 @25510 has 9 MA's), (5, 25534), (6, 25543), (13, 25633), (15, 25657), (17, 25714), (18, 25717), (27, 25855), (30, 25897), (34, 25927), (35, 25930), (42, 26032), (49, 26107), (50, 26119),

Gene: OlinDD_45 Start: 23609, Stop: 24394, Start Num: 2
Candidate Starts for OlinDD_45:
(Start: 2 @23609 has 7 MA's), (17, 23813), (22, 23903), (29, 23975), (32, 24020), (35, 24029), (48, 24188), (49, 24206), (51, 24245), (52, 24272), (54, 24299),

Gene: Pavlo_47 Start: 23888, Stop: 24673, Start Num: 4
Candidate Starts for Pavlo_47:

(Start: 4 @23888 has 6 MA's), (15, 24032), (17, 24089), (23, 24185), (30, 24272), (35, 24305), (43, 24410), (44, 24419), (48, 24467), (50, 24497),

Gene: PhillyPhilly_47 Start: 23422, Stop: 24207, Start Num: 4
Candidate Starts for PhillyPhilly_47:
(Start: 4 @23422 has 6 MA's), (15, 23566), (16, 23599), (17, 23623), (23, 23719), (30, 23806), (35, 23839), (43, 23944), (44, 23953), (46, 23971), (48, 24001),

Gene: Pioneer3_45 Start: 23617, Stop: 24402, Start Num: 2
Candidate Starts for Pioneer3_45:
(Start: 2 @23617 has 7 MA's), (17, 23821), (22, 23911), (29, 23983), (32, 24028), (35, 24037), (48, 24196), (49, 24214), (51, 24253), (52, 24280), (54, 24307),

Gene: Platte_45 Start: 23402, Stop: 24187, Start Num: 2
Candidate Starts for Platte_45:
(Start: 2 @23402 has 7 MA's), (17, 23606), (22, 23696), (29, 23768), (32, 23813), (35, 23822), (48, 23981), (49, 23999), (51, 24038), (52, 24065), (54, 24092),

Gene: Roman_48 Start: 23889, Stop: 24674, Start Num: 4
Candidate Starts for Roman_48:
(Start: 4 @23889 has 6 MA's), (17, 24090), (23, 24186), (30, 24273), (35, 24306), (43, 24411), (44, 24420), (48, 24468),

Gene: RunningBrook_55 Start: 25504, Stop: 26289, Start Num: 3
Candidate Starts for RunningBrook_55:
(Start: 3 @25504 has 9 MA's), (5, 25528), (6, 25537), (13, 25627), (15, 25651), (17, 25708), (18, 25711), (27, 25849), (30, 25891), (34, 25921), (35, 25924), (42, 26026), (49, 26101), (50, 26113),

Gene: StevieWelch_53 Start: 24896, Stop: 25681, Start Num: 3
Candidate Starts for StevieWelch_53:
(Start: 3 @24896 has 9 MA's), (5, 24920), (6, 24929), (13, 25019), (15, 25043), (18, 25103), (22, 25190), (27, 25241), (30, 25283), (34, 25313), (35, 25316), (42, 25418), (49, 25493), (50, 25505),

Gene: Tandem_45 Start: 23556, Stop: 24341, Start Num: 2
Candidate Starts for Tandem_45:
(Start: 2 @23556 has 7 MA's), (17, 23760), (22, 23850), (29, 23922), (32, 23967), (35, 23976), (48, 24135), (49, 24153), (51, 24192), (52, 24219), (54, 24246),

Gene: WaterT_39 Start: 19991, Stop: 20797, Start Num: 1
Candidate Starts for WaterT_39:
(Start: 1 @19991 has 4 MA's), (19, 20270), (25, 20363), (28, 20387), (40, 20495), (55, 20735),

Gene: Welcome_54 Start: 24916, Stop: 25701, Start Num: 3
Candidate Starts for Welcome_54:
(Start: 3 @24916 has 9 MA's), (5, 24940), (6, 24949), (13, 25039), (15, 25063), (22, 25210), (27, 25261), (30, 25303), (34, 25333), (35, 25336), (42, 25438), (49, 25513), (50, 25525),

Gene: Wolfstar_49 Start: 23797, Stop: 24582, Start Num: 2
Candidate Starts for Wolfstar_49:
(Start: 2 @23797 has 7 MA's), (10, 23893), (18, 24004), (35, 24217), (36, 24223), (43, 24322), (53, 24469),

Gene: Yuma_52 Start: 24829, Stop: 25614, Start Num: 3

Candidate Starts for Yuma_52:
(Start: 3 @24829 has 9 MA's), (5, 24853), (6, 24862), (13, 24952), (18, 25036), (22, 25123), (27, 25174), (30, 25216), (34, 25246), (35, 25249), (42, 25351), (49, 25426), (50, 25438),