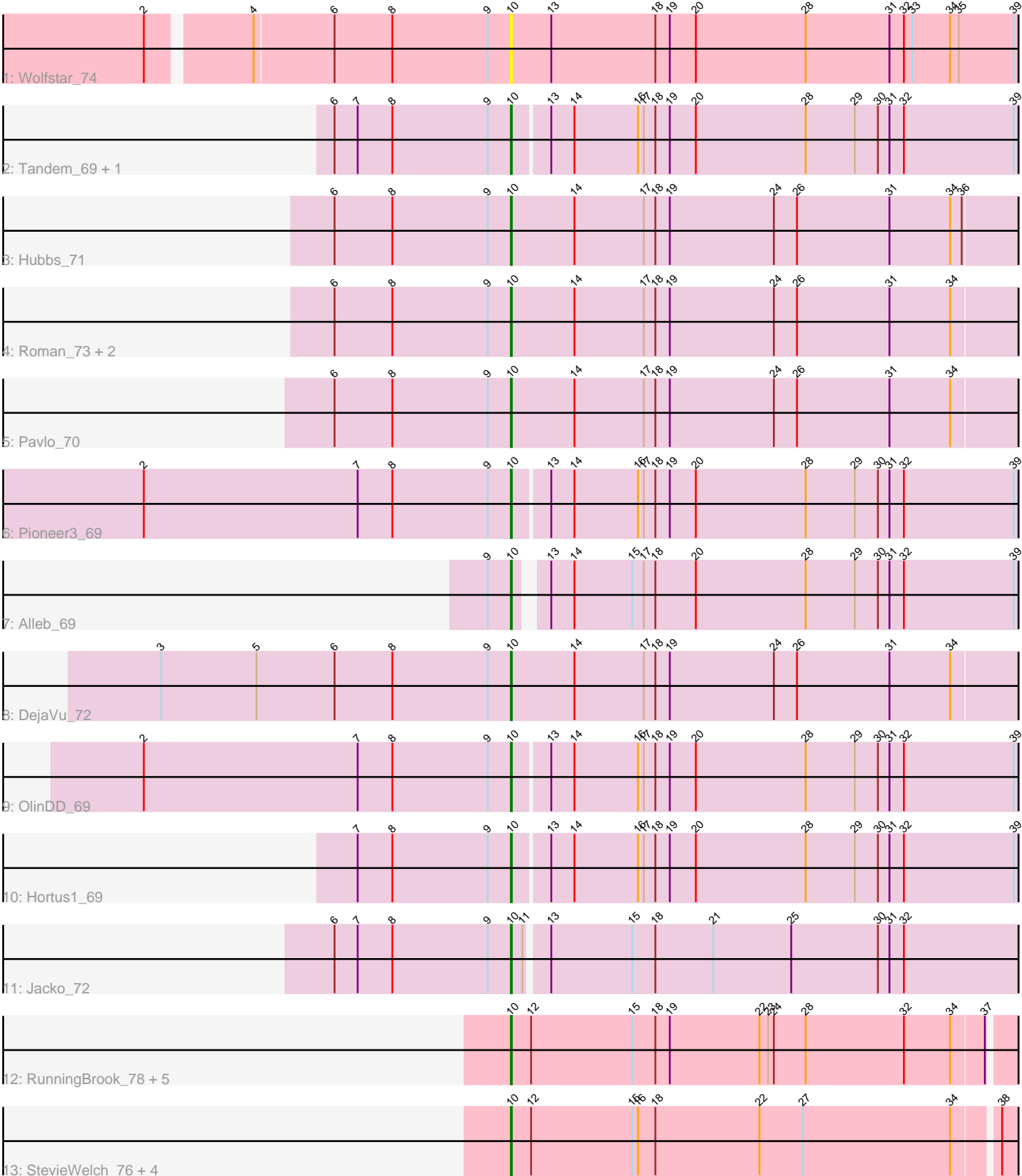


Zoomed Pham 3493



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 3493 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 3493 has 25 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar\_74
- Track 2 : Tandem\_69, Platte\_69
- Track 3 : Hubbs\_71
- Track 4 : Roman\_73, PhillyPhilly\_70, Lupine\_69
- Track 5 : Pavlo\_70
- Track 6 : Pioneer3\_69
- Track 7 : Alleb\_69
- Track 8 : DejaVu\_72
- Track 9 : OlinDD\_69
- Track 10 : Hortus1\_69
- Track 11 : Jacko\_72
- Track 12 : RunningBrook\_78, ASegato\_74, DustyDino\_79, Yuma\_74, Welcome\_77, Musetta\_75
- Track 13 : StevieWelch\_76, Erenyeager\_76, Lyell\_75, Fork\_71, Necrophoxinus\_77

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

The start number called the most often in the published annotations is 10, it was called in 22 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato\_74, Alleb\_69, DejaVu\_72, DustyDino\_79, Erenyeager\_76, Fork\_71, Hortus1\_69, Hubbs\_71, Jacko\_72, Lupine\_69, Lyell\_75, Musetta\_75, Necrophoxinus\_77, OlinDD\_69, Pavlo\_70, PhillyPhilly\_70, Pioneer3\_69, Platte\_69, Roman\_73, RunningBrook\_78, StevieWelch\_76, Tandem\_69, Welcome\_77, Wolfstar\_74, Yuma\_74,

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 10:

- Found in 25 of 25 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 22 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASegato\_74 (ED2), Alleb\_69 (ED1), DejaVu\_72 (ED1), DustyDino\_79 (ED2), Erenyeager\_76 (ED2), Fork\_71 (ED2), Hortus1\_69 (ED1), Hubbs\_71 (ED1), Jacko\_72 (ED1), Lupine\_69 (ED1), Lyell\_75 (ED2), Musetta\_75 (ED2), Necrophoxinus\_77 (ED2), OlinDD\_69 (ED1), Pavlo\_70 (ED1), PhillyPhilly\_70 (ED1), Pioneer3\_69 (ED1), Platte\_69 (ED1), Roman\_73 (ED1), RunningBrook\_78 (ED2), StevieWelch\_76 (ED2), Tandem\_69 (ED1), Welcome\_77 (ED2), Wolfstar\_74 (ED), Yuma\_74 (ED2),

### Summary by clusters:

There are 3 clusters represented in this pham: ED2, ED, ED1,

Info for manual annotations of cluster ED1:

- Start number 10 was manually annotated 13 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 10 was manually annotated 9 times for cluster ED2.

### Gene Information:

Gene: ASegato\_74 Start: 43450, Stop: 42746, Start Num: 10

Candidate Starts for ASegato\_74:

(Start: 10 @43450 has 22 MA's), (12, 43429), (15, 43324), (18, 43300), (19, 43285), (22, 43192), (23, 43183), (24, 43177), (28, 43144), (32, 43042), (34, 42994), (37, 42961), (44, 42811), (45, 42802), (47, 42778),

Gene: Alleb\_69 Start: 43649, Stop: 42906, Start Num: 10

Candidate Starts for Alleb\_69:

(9, 43673), (Start: 10 @43649 has 22 MA's), (13, 43625), (14, 43601), (15, 43541), (17, 43529), (18, 43517), (20, 43475), (28, 43361), (29, 43310), (30, 43286), (31, 43274), (32, 43259), (39, 43145), (40, 43112), (43, 43019), (44, 43016),

Gene: DejaVu\_72 Start: 43634, Stop: 42876, Start Num: 10

Candidate Starts for DejaVu\_72:

(3, 43997), (5, 43898), (6, 43817), (8, 43757), (9, 43658), (Start: 10 @43634 has 22 MA's), (14, 43568), (17, 43496), (18, 43484), (19, 43469), (24, 43361), (26, 43337), (31, 43241), (34, 43178), (44, 42986),

Gene: DustyDino\_79 Start: 44413, Stop: 43709, Start Num: 10

Candidate Starts for DustyDino\_79:

(Start: 10 @44413 has 22 MA's), (12, 44392), (15, 44287), (18, 44263), (19, 44248), (22, 44155), (23, 44146), (24, 44140), (28, 44107), (32, 44005), (34, 43957), (37, 43924), (44, 43774), (45, 43765), (47, 43741),

Gene: Erenyeager\_76 Start: 43505, Stop: 42801, Start Num: 10

Candidate Starts for Erenyeager\_76:

(Start: 10 @43505 has 22 MA's), (12, 43484), (15, 43379), (16, 43373), (18, 43355), (22, 43247), (27, 43202), (34, 43049), (38, 43007), (44, 42866), (45, 42857), (47, 42833),

Gene: Fork\_71 Start: 43160, Stop: 42456, Start Num: 10

Candidate Starts for Fork\_71:

(Start: 10 @43160 has 22 MA's), (12, 43139), (15, 43034), (16, 43028), (18, 43010), (22, 42902), (27, 42857), (34, 42704), (38, 42662), (44, 42521), (45, 42512), (47, 42488),

Gene: Hortus1\_69 Start: 43837, Stop: 43082, Start Num: 10

Candidate Starts for Hortus1\_69:

(7, 43996), (8, 43960), (9, 43861), (Start: 10 @43837 has 22 MA's), (13, 43801), (14, 43777), (16, 43711), (17, 43705), (18, 43693), (19, 43678), (20, 43651), (28, 43537), (29, 43486), (30, 43462), (31, 43450), (32, 43435), (39, 43321), (40, 43288), (43, 43195), (44, 43192),

Gene: Hubbs\_71 Start: 43862, Stop: 43104, Start Num: 10

Candidate Starts for Hubbs\_71:

(6, 44045), (8, 43985), (9, 43886), (Start: 10 @43862 has 22 MA's), (14, 43796), (17, 43724), (18, 43712), (19, 43697), (24, 43589), (26, 43565), (31, 43469), (34, 43406), (36, 43394), (41, 43274), (44, 43214),

Gene: Jacko\_72 Start: 42892, Stop: 42131, Start Num: 10

Candidate Starts for Jacko\_72:

(6, 43075), (7, 43051), (8, 43015), (9, 42916), (Start: 10 @42892 has 22 MA's), (11, 42880), (13, 42859), (15, 42775), (18, 42751), (21, 42691), (25, 42610), (30, 42520), (31, 42508), (32, 42493), (40, 42346), (44, 42250),

Gene: Lupine\_69 Start: 43048, Stop: 42290, Start Num: 10

Candidate Starts for Lupine\_69:

(6, 43231), (8, 43171), (9, 43072), (Start: 10 @43048 has 22 MA's), (14, 42982), (17, 42910), (18, 42898), (19, 42883), (24, 42775), (26, 42751), (31, 42655), (34, 42592), (44, 42400),

Gene: Lyell\_75 Start: 43359, Stop: 42655, Start Num: 10

Candidate Starts for Lyell\_75:

(Start: 10 @43359 has 22 MA's), (12, 43338), (15, 43233), (16, 43227), (18, 43209), (22, 43101), (27, 43056), (34, 42903), (38, 42861), (44, 42720), (45, 42711), (47, 42687),

Gene: Musetta\_75 Start: 43880, Stop: 43176, Start Num: 10

Candidate Starts for Musetta\_75:

(Start: 10 @43880 has 22 MA's), (12, 43859), (15, 43754), (18, 43730), (19, 43715), (22, 43622), (23, 43613), (24, 43607), (28, 43574), (32, 43472), (34, 43424), (37, 43391), (44, 43241), (45, 43232), (47, 43208),

Gene: Necrophoxinus\_77 Start: 44054, Stop: 43350, Start Num: 10

Candidate Starts for Necrophoxinus\_77:

(Start: 10 @44054 has 22 MA's), (12, 44033), (15, 43928), (16, 43922), (18, 43904), (22, 43796), (27, 43751), (34, 43598), (38, 43556), (44, 43415), (45, 43406), (47, 43382),

Gene: OlinDD\_69 Start: 43836, Stop: 43081, Start Num: 10

Candidate Starts for OlinDD\_69:

(2, 44217), (7, 43995), (8, 43959), (9, 43860), (Start: 10 @43836 has 22 MA's), (13, 43800), (14, 43776), (16, 43710), (17, 43704), (18, 43692), (19, 43677), (20, 43650), (28, 43536), (29, 43485), (30, 43461), (31, 43449), (32, 43434), (39, 43320), (40, 43287), (43, 43194), (44, 43191),

Gene: Pavlo\_70 Start: 43693, Stop: 42935, Start Num: 10

Candidate Starts for Pavlo\_70:

(6, 43876), (8, 43816), (9, 43717), (Start: 10 @43693 has 22 MA's), (14, 43627), (17, 43555), (18, 43543), (19, 43528), (24, 43420), (26, 43396), (31, 43300), (34, 43237), (44, 43045),

Gene: PhillyPhilly\_70 Start: 43227, Stop: 42469, Start Num: 10

Candidate Starts for PhillyPhilly\_70:

(6, 43410), (8, 43350), (9, 43251), (Start: 10 @43227 has 22 MA's), (14, 43161), (17, 43089), (18, 43077), (19, 43062), (24, 42954), (26, 42930), (31, 42834), (34, 42771), (44, 42579),

Gene: Pioneer3\_69 Start: 43658, Stop: 42903, Start Num: 10

Candidate Starts for Pioneer3\_69:

(2, 44039), (7, 43817), (8, 43781), (9, 43682), (Start: 10 @43658 has 22 MA's), (13, 43622), (14, 43598), (16, 43532), (17, 43526), (18, 43514), (19, 43499), (20, 43472), (28, 43358), (29, 43307), (30, 43283), (31, 43271), (32, 43256), (39, 43142), (40, 43109), (43, 43016), (44, 43013),

Gene: Platte\_69 Start: 43629, Stop: 42874, Start Num: 10

Candidate Starts for Platte\_69:

(6, 43812), (7, 43788), (8, 43752), (9, 43653), (Start: 10 @43629 has 22 MA's), (13, 43593), (14, 43569), (16, 43503), (17, 43497), (18, 43485), (19, 43470), (20, 43443), (28, 43329), (29, 43278), (30, 43254), (31, 43242), (32, 43227), (39, 43113), (40, 43080), (43, 42987), (44, 42984),

Gene: Roman\_73 Start: 44348, Stop: 43590, Start Num: 10

Candidate Starts for Roman\_73:

(6, 44531), (8, 44471), (9, 44372), (Start: 10 @44348 has 22 MA's), (14, 44282), (17, 44210), (18, 44198), (19, 44183), (24, 44075), (26, 44051), (31, 43955), (34, 43892), (44, 43700),

Gene: RunningBrook\_78 Start: 44413, Stop: 43709, Start Num: 10

Candidate Starts for RunningBrook\_78:

(Start: 10 @44413 has 22 MA's), (12, 44392), (15, 44287), (18, 44263), (19, 44248), (22, 44155), (23, 44146), (24, 44140), (28, 44107), (32, 44005), (34, 43957), (37, 43924), (44, 43774), (45, 43765), (47, 43741),

Gene: StevieWelch\_76 Start: 43505, Stop: 42801, Start Num: 10

Candidate Starts for StevieWelch\_76:

(Start: 10 @43505 has 22 MA's), (12, 43484), (15, 43379), (16, 43373), (18, 43355), (22, 43247), (27, 43202), (34, 43049), (38, 43007), (44, 42866), (45, 42857), (47, 42833),

Gene: Tandem\_69 Start: 43756, Stop: 43001, Start Num: 10

Candidate Starts for Tandem\_69:

(6, 43939), (7, 43915), (8, 43879), (9, 43780), (Start: 10 @43756 has 22 MA's), (13, 43720), (14, 43696), (16, 43630), (17, 43624), (18, 43612), (19, 43597), (20, 43570), (28, 43456), (29, 43405), (30, 43381), (31, 43369), (32, 43354), (39, 43240), (40, 43207), (43, 43114), (44, 43111),

Gene: Welcome\_77 Start: 43865, Stop: 43161, Start Num: 10

Candidate Starts for Welcome\_77:

(Start: 10 @43865 has 22 MA's), (12, 43844), (15, 43739), (18, 43715), (19, 43700), (22, 43607), (23, 43598), (24, 43592), (28, 43559), (32, 43457), (34, 43409), (37, 43376), (44, 43226), (45, 43217), (47, 43193),

Gene: Wolfstar\_74 Start: 45156, Stop: 44395, Start Num: 10

Candidate Starts for Wolfstar\_74:

(1, 45747), (2, 45519), (4, 45420), (6, 45339), (8, 45279), (9, 45180), (Start: 10 @45156 has 22 MA's), (13, 45114), (18, 45006), (19, 44991), (20, 44964), (28, 44850), (31, 44763), (32, 44748), (33, 44739), (34, 44700), (35, 44691), (39, 44634), (42, 44547), (43, 44508), (44, 44505), (46, 44493),

Gene: Yuma\_74 Start: 43374, Stop: 42670, Start Num: 10

Candidate Starts for Yuma\_74:

(Start: 10 @43374 has 22 MA's), (12, 43353), (15, 43248), (18, 43224), (19, 43209), (22, 43116), (23, 43107), (24, 43101), (28, 43068), (32, 42966), (34, 42918), (37, 42885), (44, 42735), (45, 42726), (47, 42702),