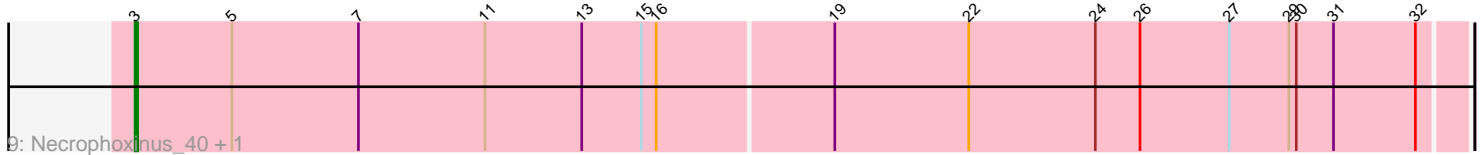
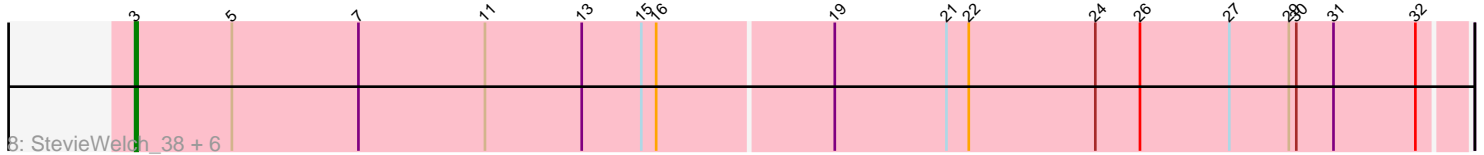
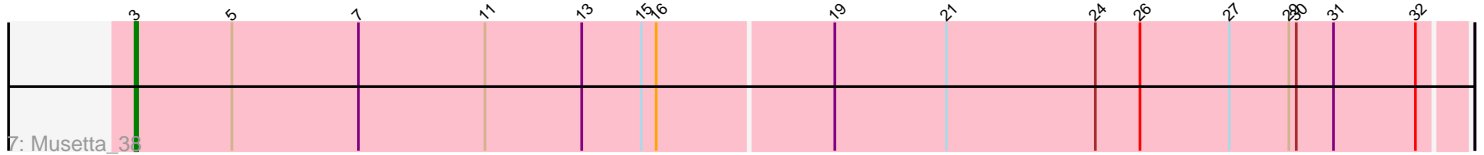
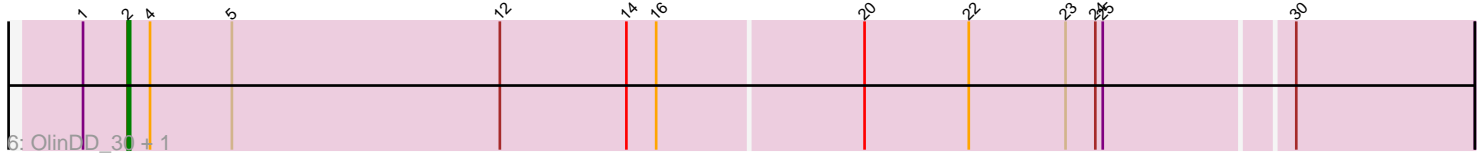
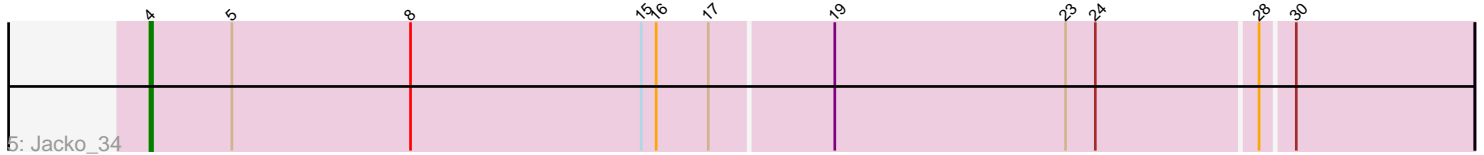
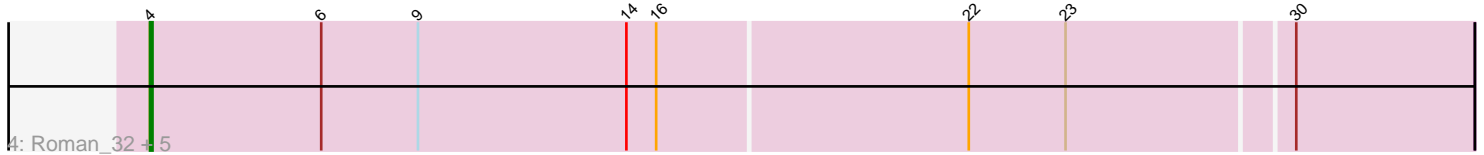
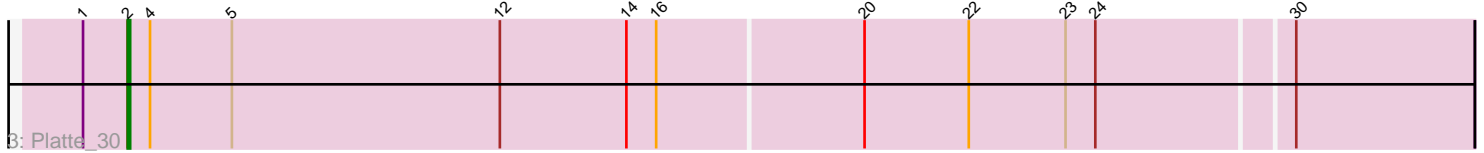
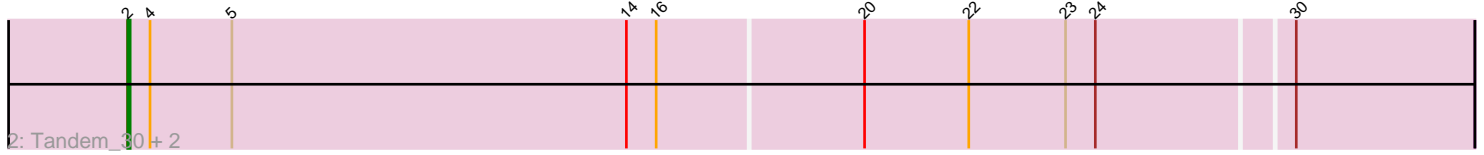
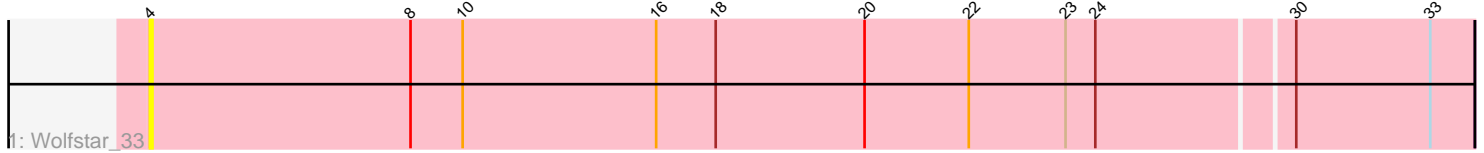


Pham 3545



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 3545 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 3545 has 25 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar_33
- Track 2 : Tandem_30, Alleb_31, Pioneer3_30
- Track 3 : Platte_30
- Track 4 : Roman_32, Hubbs_32, Lupine_31, Pavlo_31, PhillyPhilly_32, DejaVu_33
- Track 5 : Jacko_34
- Track 6 : OlinDD_30, Hortus1_30
- Track 7 : Musetta_38
- Track 8 : StevieWelch_38, DustyDino_41, Fork_34, Yuma_37, Welcome_39, RunningBrook_40, Lyell_38
- Track 9 : Necrophoxinus_40, ASegato_37
- Track 10 : Erenyeager_38

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 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato_37, DustyDino_41, Erenyeager_38, Fork_34, Lyell_38, Musetta_38, Necrophoxinus_40, RunningBrook_40, StevieWelch_38, Welcome_39, Yuma_37,

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

-

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

- Alleb_31, DejaVu_33, Hortus1_30, Hubbs_32, Jacko_34, Lupine_31, OlinDD_30, Pavlo_31, PhillyPhilly_32, Pioneer3_30, Platte_30, Roman_32, Tandem_30, Wolfstar_33,

Summary by start number:

Start 2:

- Found in 6 of 25 (24.0%) of genes in pham
- Manual Annotations of this start: 6 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alleb_31 (ED1), Hortus1_30 (ED1), OlinDD_30 (ED1), Pioneer3_30 (ED1), Platte_30 (ED1), Tandem_30 (ED1),

Start 3:

- Found in 11 of 25 (44.0%) of genes in pham
- Manual Annotations of this start: 9 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASegato_37 (ED2), DustyDino_41 (ED2), Erenyeager_38 (ED2), Fork_34 (ED2), Lyell_38 (ED2), Musetta_38 (ED2), Necrophoxinus_40 (ED2), RunningBrook_40 (ED2), StevieWelch_38 (ED2), Welcome_39 (ED2), Yuma_37 (ED2),

Start 4:

- Found in 14 of 25 (56.0%) of genes in pham
- Manual Annotations of this start: 7 of 22
- Called 57.1% of time when present
- Phage (with cluster) where this start called: DejaVu_33 (ED1), Hubbs_32 (ED1), Jacko_34 (ED1), Lupine_31 (ED1), Pavlo_31 (ED1), PhillyPhilly_32 (ED1), Roman_32 (ED1), Wolfstar_33 (ED),

Summary by clusters:

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

Info for manual annotations of cluster ED1:

- Start number 2 was manually annotated 6 times for cluster ED1.
- Start number 4 was manually annotated 7 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 3 was manually annotated 9 times for cluster ED2.

Gene Information:

Gene: ASegato_37 Start: 12329, Stop: 12859, Start Num: 3

Candidate Starts for ASegato_37:

(Start: 3 @12329 has 9 MA's), (5, 12368), (7, 12419), (11, 12470), (13, 12509), (15, 12533), (16, 12539), (19, 12608), (22, 12662), (24, 12713), (26, 12731), (27, 12767), (29, 12791), (30, 12794), (31, 12809), (32, 12842),

Gene: Alleb_31 Start: 10832, Stop: 11365, Start Num: 2

Candidate Starts for Alleb_31:

(Start: 2 @10832 has 6 MA's), (Start: 4 @10841 has 7 MA's), (5, 10874), (14, 11033), (16, 11045), (20, 11126), (22, 11168), (23, 11207), (24, 11219), (30, 11294),

Gene: DejaVu_33 Start: 11169, Stop: 11693, Start Num: 4

Candidate Starts for DejaVu_33:

(Start: 4 @11169 has 7 MA's), (6, 11238), (9, 11277), (14, 11361), (16, 11373), (22, 11496), (23, 11535), (30, 11622),

Gene: DustyDino_41 Start: 13277, Stop: 13807, Start Num: 3

Candidate Starts for DustyDino_41:

(Start: 3 @13277 has 9 MA's), (5, 13316), (7, 13367), (11, 13418), (13, 13457), (15, 13481), (16, 13487), (19, 13556), (21, 13601), (22, 13610), (24, 13661), (26, 13679), (27, 13715), (29, 13739), (30, 13742), (31, 13757), (32, 13790),

Gene: Erenyeager_38 Start: 12672, Stop: 13202, Start Num: 3

Candidate Starts for Erenyeager_38:

(Start: 3 @12672 has 9 MA's), (5, 12711), (7, 12762), (11, 12813), (13, 12852), (15, 12876), (16, 12882), (19, 12951), (22, 13005), (24, 13056), (26, 13074), (27, 13110), (30, 13137), (31, 13152), (32, 13185),

Gene: Fork_34 Start: 11987, Stop: 12517, Start Num: 3

Candidate Starts for Fork_34:

(Start: 3 @11987 has 9 MA's), (5, 12026), (7, 12077), (11, 12128), (13, 12167), (15, 12191), (16, 12197), (19, 12266), (21, 12311), (22, 12320), (24, 12371), (26, 12389), (27, 12425), (29, 12449), (30, 12452), (31, 12467), (32, 12500),

Gene: Hortus1_30 Start: 10846, Stop: 11379, Start Num: 2

Candidate Starts for Hortus1_30:

(1, 10828), (Start: 2 @10846 has 6 MA's), (Start: 4 @10855 has 7 MA's), (5, 10888), (12, 10996), (14, 11047), (16, 11059), (20, 11140), (22, 11182), (23, 11221), (24, 11233), (25, 11236), (30, 11308),

Gene: Hubbs_32 Start: 11381, Stop: 11905, Start Num: 4

Candidate Starts for Hubbs_32:

(Start: 4 @11381 has 7 MA's), (6, 11450), (9, 11489), (14, 11573), (16, 11585), (22, 11708), (23, 11747), (30, 11834),

Gene: Jacko_34 Start: 11371, Stop: 11895, Start Num: 4

Candidate Starts for Jacko_34:

(Start: 4 @11371 has 7 MA's), (5, 11404), (8, 11476), (15, 11569), (16, 11575), (17, 11596), (19, 11644), (23, 11737), (24, 11749), (28, 11812), (30, 11824),

Gene: Lupine_31 Start: 11053, Stop: 11577, Start Num: 4

Candidate Starts for Lupine_31:

(Start: 4 @11053 has 7 MA's), (6, 11122), (9, 11161), (14, 11245), (16, 11257), (22, 11380), (23, 11419), (30, 11506),

Gene: Lyell_38 Start: 12590, Stop: 13120, Start Num: 3

Candidate Starts for Lyell_38:

(Start: 3 @12590 has 9 MA's), (5, 12629), (7, 12680), (11, 12731), (13, 12770), (15, 12794), (16, 12800), (19, 12869), (21, 12914), (22, 12923), (24, 12974), (26, 12992), (27, 13028), (29, 13052), (30, 13055), (31, 13070), (32, 13103),

Gene: Musetta_38 Start: 12697, Stop: 13227, Start Num: 3

Candidate Starts for Musetta_38:

(Start: 3 @12697 has 9 MA's), (5, 12736), (7, 12787), (11, 12838), (13, 12877), (15, 12901), (16, 12907), (19, 12976), (21, 13021), (24, 13081), (26, 13099), (27, 13135), (29, 13159), (30, 13162), (31, 13177), (32, 13210),

Gene: Necrophoxinus_40 Start: 13285, Stop: 13815, Start Num: 3

Candidate Starts for Necrophoxinus_40:

(Start: 3 @13285 has 9 MA's), (5, 13324), (7, 13375), (11, 13426), (13, 13465), (15, 13489), (16, 13495), (19, 13564), (22, 13618), (24, 13669), (26, 13687), (27, 13723), (29, 13747), (30, 13750), (31, 13765), (32, 13798),

Gene: OlinDD_30 Start: 10845, Stop: 11378, Start Num: 2

Candidate Starts for OlinDD_30:

(1, 10827), (Start: 2 @10845 has 6 MA's), (Start: 4 @10854 has 7 MA's), (5, 10887), (12, 10995), (14, 11046), (16, 11058), (20, 11139), (22, 11181), (23, 11220), (24, 11232), (25, 11235), (30, 11307),

Gene: Pavlo_31 Start: 11328, Stop: 11852, Start Num: 4

Candidate Starts for Pavlo_31:

(Start: 4 @11328 has 7 MA's), (6, 11397), (9, 11436), (14, 11520), (16, 11532), (22, 11655), (23, 11694), (30, 11781),

Gene: PhillyPhilly_32 Start: 11233, Stop: 11757, Start Num: 4

Candidate Starts for PhillyPhilly_32:

(Start: 4 @11233 has 7 MA's), (6, 11302), (9, 11341), (14, 11425), (16, 11437), (22, 11560), (23, 11599), (30, 11686),

Gene: Pioneer3_30 Start: 10829, Stop: 11362, Start Num: 2

Candidate Starts for Pioneer3_30:

(Start: 2 @10829 has 6 MA's), (Start: 4 @10838 has 7 MA's), (5, 10871), (14, 11030), (16, 11042), (20, 11123), (22, 11165), (23, 11204), (24, 11216), (30, 11291),

Gene: Platte_30 Start: 10614, Stop: 11147, Start Num: 2

Candidate Starts for Platte_30:

(1, 10596), (Start: 2 @10614 has 6 MA's), (Start: 4 @10623 has 7 MA's), (5, 10656), (12, 10764), (14, 10815), (16, 10827), (20, 10908), (22, 10950), (23, 10989), (24, 11001), (30, 11076),

Gene: Roman_32 Start: 11228, Stop: 11752, Start Num: 4

Candidate Starts for Roman_32:

(Start: 4 @11228 has 7 MA's), (6, 11297), (9, 11336), (14, 11420), (16, 11432), (22, 11555), (23, 11594), (30, 11681),

Gene: RunningBrook_40 Start: 13277, Stop: 13807, Start Num: 3

Candidate Starts for RunningBrook_40:

(Start: 3 @13277 has 9 MA's), (5, 13316), (7, 13367), (11, 13418), (13, 13457), (15, 13481), (16, 13487), (19, 13556), (21, 13601), (22, 13610), (24, 13661), (26, 13679), (27, 13715), (29, 13739), (30, 13742), (31, 13757), (32, 13790),

Gene: StevieWelch_38 Start: 12677, Stop: 13207, Start Num: 3

Candidate Starts for StevieWelch_38:

(Start: 3 @12677 has 9 MA's), (5, 12716), (7, 12767), (11, 12818), (13, 12857), (15, 12881), (16, 12887), (19, 12956), (21, 13001), (22, 13010), (24, 13061), (26, 13079), (27, 13115), (29, 13139), (30, 13142), (31, 13157), (32, 13190),

Gene: Tandem_30 Start: 10768, Stop: 11301, Start Num: 2

Candidate Starts for Tandem_30:

(Start: 2 @10768 has 6 MA's), (Start: 4 @10777 has 7 MA's), (5, 10810), (14, 10969), (16, 10981), (20, 11062), (22, 11104), (23, 11143), (24, 11155), (30, 11230),

Gene: Welcome_39 Start: 12694, Stop: 13224, Start Num: 3

Candidate Starts for Welcome_39:

(Start: 3 @12694 has 9 MA's), (5, 12733), (7, 12784), (11, 12835), (13, 12874), (15, 12898), (16, 12904), (19, 12973), (21, 13018), (22, 13027), (24, 13078), (26, 13096), (27, 13132), (29, 13156), (30, 13159), (31, 13174), (32, 13207),

Gene: Wolfstar_33 Start: 11626, Stop: 12153, Start Num: 4

Candidate Starts for Wolfstar_33:

(Start: 4 @11626 has 7 MA's), (8, 11731), (10, 11752), (16, 11830), (18, 11854), (20, 11914), (22, 11956), (23, 11995), (24, 12007), (30, 12082), (33, 12136),

Gene: Yuma_37 Start: 12596, Stop: 13126, Start Num: 3

Candidate Starts for Yuma_37:

(Start: 3 @12596 has 9 MA's), (5, 12635), (7, 12686), (11, 12737), (13, 12776), (15, 12800), (16, 12806), (19, 12875), (21, 12920), (22, 12929), (24, 12980), (26, 12998), (27, 13034), (29, 13058), (30, 13061), (31, 13076), (32, 13109),