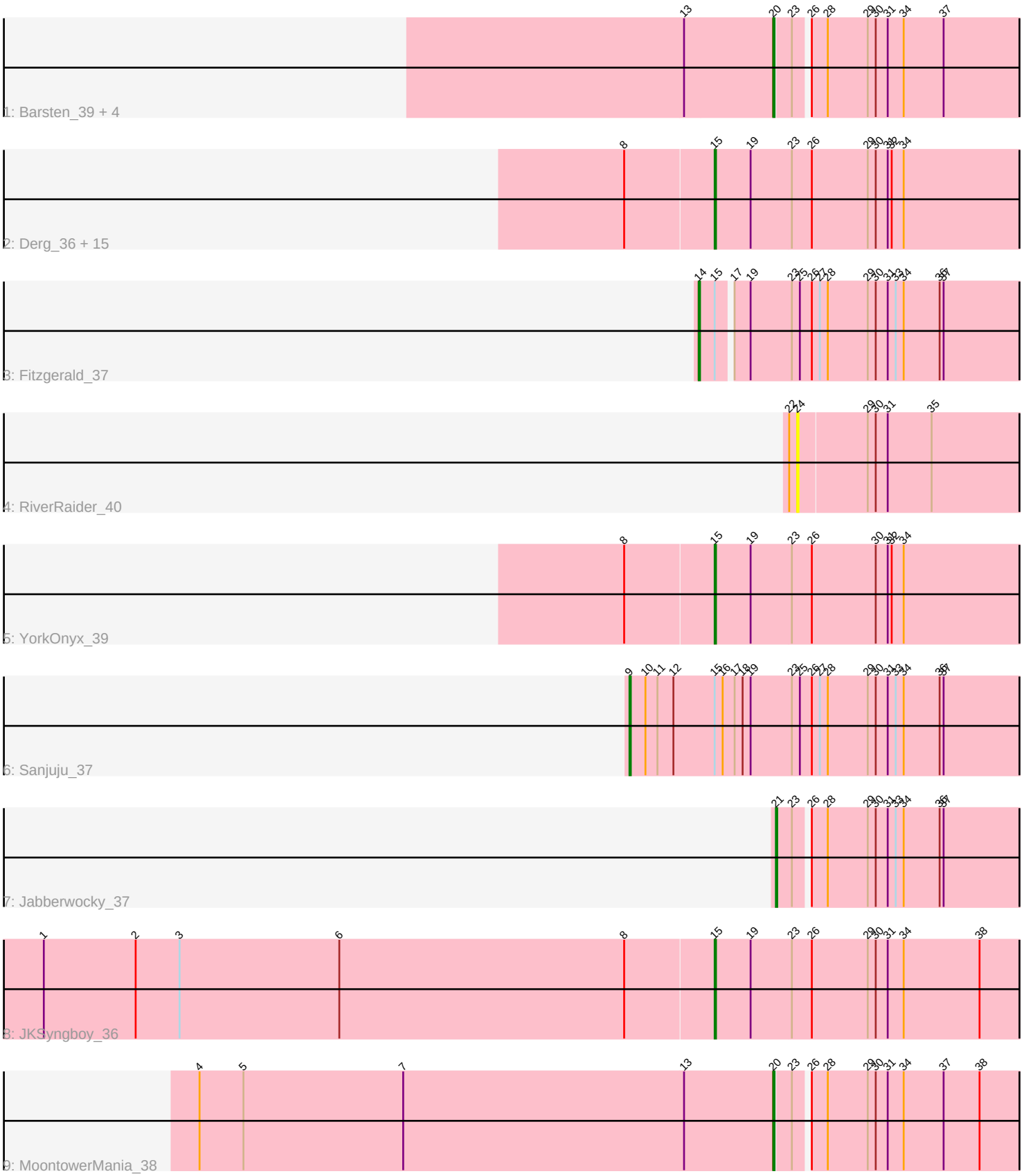
# Pham 3621


13
20
23
26
28
29
30
31
34
37
1: Barsten_39 + 4
8
15
19
23
26
29
30
31
32
34
2: Derg_36 + 15
14
15
17
19
23
25
26
27
28
29
30
31
33
34
37
3: Fitzgerald_37
22
24
29
30
31
35
4: RiverRaider_40
8
15
19
23
26
30
32
34
5: YorkOnyx_39
9
10
11
12
15
16
17
18
19
23
25
26
27
28
29
30
31
33
34
37
6: Sanjuju_37
21
23
26
28
29
30
31
33
34
37
7: Jabberwocky_37
1
2
3
6
8
15
19
23
26
29
30
31
34
38
8: JKSyngboy_36
4
5
7
13
20
23
26
28
29
30
31
34
37
38
9: MoontowerMania_38

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 3621 Report

This analysis was run 04/12/24 on database version 558.

Pham number 3621 has 28 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Barsten_39, Kewpiedoll_38, Stultus_37, Geodirt_37, ChadMasterC_39
• Track 2 : Derg_36, Gaea_38, Gustavo_38, Kwobi_39, StorminNorm_38, Tangerine_38, Flatwoods_39, Bizzy_39, LilHam_36, Ribeye_39, Saronaya_38, Baddon_38, Tycho_38, Ashertheman_39, Kroos_39, SchottB_37
• Track 3 : Fitzgerald_37
• Track 4 : RiverRaider_40
• Track 5 : YorkOnyx_39
• Track 6 : Sanjuju_37
• Track 7 : Jabberwocky_37
• Track 8 : JKSyngboy_36
• Track 9 : MoontowerMania_38

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

The start number called the most often in the published annotations is 15, it was called in 12 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ashertheman_39, Baddon_38, Bizzy_39, Derg_36, Flatwoods_39, Gaea_38, Gustavo_38, JKSyngboy_36, Kroos_39, Kwobi_39, LilHam_36, Ribeye_39, Saronaya_38, SchottB_37, StorminNorm_38, Tangerine_38, Tycho_38, YorkOnyx_39,

Genes that have the "Most Annotated" start but do not call it:
• Fitzgerald_37, Sanjuju_37,

Genes that do not have the "Most Annotated" start:
• Barsten_39, ChadMasterC_39, Geodirt_37, Jabberwocky_37, Kewpiedoll_38, MoontowerMania_38, RiverRaider_40, Stultus_37,

**Summary by start number:**

Start 9:
• Found in 1 of 28 ( 3.6% ) of genes in pham

• Manual Annotations of this start: 1 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sanjuju_37 (DE1),

Start 14:
• Found in 1 of 28 ( 3.6% ) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fitzgerald_37 (DE1),

Start 15:
• Found in 20 of 28 ( 71.4% ) of genes in pham
• Manual Annotations of this start: 12 of 21
• Called 90.0% of time when present
• Phage (with cluster) where this start called: Ashertheman_39 (DE1), Baddon_38 (DE1), Bizzy_39 (DE1), Derg_36 (DE1), Flatwoods_39 (DE1), Gaea_38 (DE1), Gustavo_38 (DE1), JKSyngboy_36 (DE1), Kroos_39 (DE1), Kwobi_39 (DE1), LilHam_36 (DE1), Ribeye_39 (DE1), Saronaya_38 (DE1), SchottB_37 (DE1), StorminNorm_38 (DE1), Tangerine_38 (DE1), Tycho_38 (DE1), YorkOnyx_39 (DE1),

Start 20:
• Found in 6 of 28 ( 21.4% ) of genes in pham
• Manual Annotations of this start: 6 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Barsten_39 (DE1), ChadMasterC_39 (DE1), Geodirt_37 (DE1), Kewpiedoll_38 (DE1), MoontowerMania_38 (DE1), Stultus_37 (DE1),

Start 21:
• Found in 1 of 28 ( 3.6% ) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jabberwocky_37 (DE1),

Start 24:
• Found in 1 of 28 ( 3.6% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RiverRaider_40 (DE1),

**Summary by clusters:**

There is one cluster represented in this pham: DE1

Info for manual annotations of cluster DE1:
•Start number 9 was manually annotated 1 time for cluster DE1.
•Start number 14 was manually annotated 1 time for cluster DE1.
•Start number 15 was manually annotated 12 times for cluster DE1.
•Start number 20 was manually annotated 6 times for cluster DE1.
•Start number 21 was manually annotated 1 time for cluster DE1.

### *Gene Information:*

Gene: Ashertheman_39 Start: 34249, Stop: 34491, Start Num: 15
Candidate Starts for Ashertheman_39:
(8, 34183), (Start: 15 @34249 has 12 MA's), (19, 34276), (23, 34306), (26, 34321), (29, 34363), (30, 34369), (31, 34378), (32, 34381), (34, 34390),

Gene: Baddon_38 Start: 35046, Stop: 35288, Start Num: 15
Candidate Starts for Baddon_38:
(8, 34980), (Start: 15 @35046 has 12 MA's), (19, 35073), (23, 35103), (26, 35118), (29, 35160), (30, 35166), (31, 35175), (32, 35178), (34, 35187),

Gene: Barsten_39 Start: 34595, Stop: 34786, Start Num: 20
Candidate Starts for Barsten_39:
(13, 34529), (Start: 20 @34595 has 6 MA's), (23, 34607), (26, 34616), (28, 34628), (29, 34658), (30, 34664), (31, 34673), (34, 34685), (37, 34715),

Gene: Bizzy_39 Start: 34193, Stop: 34435, Start Num: 15
Candidate Starts for Bizzy_39:
(8, 34127), (Start: 15 @34193 has 12 MA's), (19, 34220), (23, 34250), (26, 34265), (29, 34307), (30, 34313), (31, 34322), (32, 34325), (34, 34334),

Gene: ChadMasterC_39 Start: 35994, Stop: 36185, Start Num: 20
Candidate Starts for ChadMasterC_39:
(13, 35928), (Start: 20 @35994 has 6 MA's), (23, 36006), (26, 36015), (28, 36027), (29, 36057), (30, 36063), (31, 36072), (34, 36084), (37, 36114),

Gene: Derg_36 Start: 33789, Stop: 34031, Start Num: 15
Candidate Starts for Derg_36:
(8, 33723), (Start: 15 @33789 has 12 MA's), (19, 33816), (23, 33846), (26, 33861), (29, 33903), (30, 33909), (31, 33918), (32, 33921), (34, 33930),

Gene: Fitzgerald_37 Start: 35212, Stop: 35460, Start Num: 14
Candidate Starts for Fitzgerald_37:
(Start: 14 @35212 has 1 MA's), (Start: 15 @35224 has 12 MA's), (17, 35233), (19, 35245), (23, 35275), (25, 35281), (26, 35290), (27, 35296), (28, 35302), (29, 35332), (30, 35338), (31, 35347), (33, 35353), (34, 35359), (36, 35386), (37, 35389),

Gene: Flatwoods_39 Start: 34150, Stop: 34392, Start Num: 15
Candidate Starts for Flatwoods_39:
(8, 34084), (Start: 15 @34150 has 12 MA's), (19, 34177), (23, 34207), (26, 34222), (29, 34264), (30, 34270), (31, 34279), (32, 34282), (34, 34291),

Gene: Gaea_38 Start: 33798, Stop: 34040, Start Num: 15
Candidate Starts for Gaea_38:
(8, 33732), (Start: 15 @33798 has 12 MA's), (19, 33825), (23, 33855), (26, 33870), (29, 33912), (30, 33918), (31, 33927), (32, 33930), (34, 33939),

Gene: Geodirt_37 Start: 35137, Stop: 35328, Start Num: 20
Candidate Starts for Geodirt_37:
(13, 35071), (Start: 20 @35137 has 6 MA's), (23, 35149), (26, 35158), (28, 35170), (29, 35200), (30, 35206), (31, 35215), (34, 35227), (37, 35257),

Gene: Gustavo_38 Start: 33953, Stop: 34195, Start Num: 15
Candidate Starts for Gustavo_38:
(8, 33887), (Start: 15 @33953 has 12 MA's), (19, 33980), (23, 34010), (26, 34025), (29, 34067), (30, 34073), (31, 34082), (32, 34085), (34, 34094),

Gene: JKSyngboy_36 Start: 34528, Stop: 34770, Start Num: 15
Candidate Starts for JKSyngboy_36:
(1, 34027), (2, 34096), (3, 34129), (6, 34249), (8, 34462), (Start: 15 @34528 has 12 MA's), (19, 34555), (23, 34585), (26, 34600), (29, 34642), (30, 34648), (31, 34657), (34, 34669), (38, 34726),

Gene: Jabberwocky_37 Start: 35673, Stop: 35864, Start Num: 21
Candidate Starts for Jabberwocky_37:
(Start: 21 @35673 has 1 MA's), (23, 35685), (26, 35694), (28, 35706), (29, 35736), (30, 35742), (31, 35751), (33, 35757), (34, 35763), (36, 35790), (37, 35793),

Gene: Kewpiedoll_38 Start: 34532, Stop: 34723, Start Num: 20
Candidate Starts for Kewpiedoll_38:
(13, 34466), (Start: 20 @34532 has 6 MA's), (23, 34544), (26, 34553), (28, 34565), (29, 34595), (30, 34601), (31, 34610), (34, 34622), (37, 34652),

Gene: Kroos_39 Start: 34706, Stop: 34948, Start Num: 15
Candidate Starts for Kroos_39:
(8, 34640), (Start: 15 @34706 has 12 MA's), (19, 34733), (23, 34763), (26, 34778), (29, 34820), (30, 34826), (31, 34835), (32, 34838), (34, 34847),

Gene: Kwobi_39 Start: 34692, Stop: 34934, Start Num: 15
Candidate Starts for Kwobi_39:
(8, 34626), (Start: 15 @34692 has 12 MA's), (19, 34719), (23, 34749), (26, 34764), (29, 34806), (30, 34812), (31, 34821), (32, 34824), (34, 34833),

Gene: LilHam_36 Start: 33295, Stop: 33537, Start Num: 15
Candidate Starts for LilHam_36:
(8, 33229), (Start: 15 @33295 has 12 MA's), (19, 33322), (23, 33352), (26, 33367), (29, 33409), (30, 33415), (31, 33424), (32, 33427), (34, 33436),

Gene: MoontowerMania_38 Start: 34898, Stop: 35089, Start Num: 20
Candidate Starts for MoontowerMania_38:
(4, 34469), (5, 34502), (7, 34622), (13, 34832), (Start: 20 @34898 has 6 MA's), (23, 34910), (26, 34919), (28, 34931), (29, 34961), (30, 34967), (31, 34976), (34, 34988), (37, 35018), (38, 35045),

Gene: Ribeye_39 Start: 35110, Stop: 35352, Start Num: 15
Candidate Starts for Ribeye_39:
(8, 35044), (Start: 15 @35110 has 12 MA's), (19, 35137), (23, 35167), (26, 35182), (29, 35224), (30, 35230), (31, 35239), (32, 35242), (34, 35251),

Gene: RiverRaider_40 Start: 33403, Stop: 33582, Start Num: 24
Candidate Starts for RiverRaider_40:
(22, 33397), (24, 33403), (29, 33454), (30, 33460), (31, 33469), (35, 33502),

Gene: Sanjuju_37 Start: 35288, Stop: 35593, Start Num: 9
Candidate Starts for Sanjuju_37:
(Start: 9 @35288 has 1 MA's), (10, 35300), (11, 35309), (12, 35321), (Start: 15 @35351 has 12 MA's), (16, 35357), (17, 35366), (18, 35372), (19, 35378), (23, 35408), (25, 35414), (26, 35423), (27, 35429),

(28, 35435), (29, 35465), (30, 35471), (31, 35480), (33, 35486), (34, 35492), (36, 35519), (37, 35522),

Gene: Saronaya_38 Start: 33953, Stop: 34195, Start Num: 15
Candidate Starts for Saronaya_38:
(8, 33887), (Start: 15 @33953 has 12 MA's), (19, 33980), (23, 34010), (26, 34025), (29, 34067), (30, 34073), (31, 34082), (32, 34085), (34, 34094),

Gene: SchottB_37 Start: 34968, Stop: 35210, Start Num: 15
Candidate Starts for SchottB_37:
(8, 34902), (Start: 15 @34968 has 12 MA's), (19, 34995), (23, 35025), (26, 35040), (29, 35082), (30, 35088), (31, 35097), (32, 35100), (34, 35109),

Gene: StorminNorm_38 Start: 33835, Stop: 34077, Start Num: 15
Candidate Starts for StorminNorm_38:
(8, 33769), (Start: 15 @33835 has 12 MA's), (19, 33862), (23, 33892), (26, 33907), (29, 33949), (30, 33955), (31, 33964), (32, 33967), (34, 33976),

Gene: Stultus_37 Start: 34204, Stop: 34395, Start Num: 20
Candidate Starts for Stultus_37:
(13, 34138), (Start: 20 @34204 has 6 MA's), (23, 34216), (26, 34225), (28, 34237), (29, 34267), (30, 34273), (31, 34282), (34, 34294), (37, 34324),

Gene: Tangerine_38 Start: 33838, Stop: 34080, Start Num: 15
Candidate Starts for Tangerine_38:
(8, 33772), (Start: 15 @33838 has 12 MA's), (19, 33865), (23, 33895), (26, 33910), (29, 33952), (30, 33958), (31, 33967), (32, 33970), (34, 33979),

Gene: Tycho_38 Start: 33927, Stop: 34169, Start Num: 15
Candidate Starts for Tycho_38:
(8, 33861), (Start: 15 @33927 has 12 MA's), (19, 33954), (23, 33984), (26, 33999), (29, 34041), (30, 34047), (31, 34056), (32, 34059), (34, 34068),

Gene: YorkOnyx_39 Start: 34186, Stop: 34428, Start Num: 15
Candidate Starts for YorkOnyx_39:
(8, 34120), (Start: 15 @34186 has 12 MA's), (19, 34213), (23, 34243), (26, 34258), (30, 34306), (31, 34315), (32, 34318), (34, 34327),