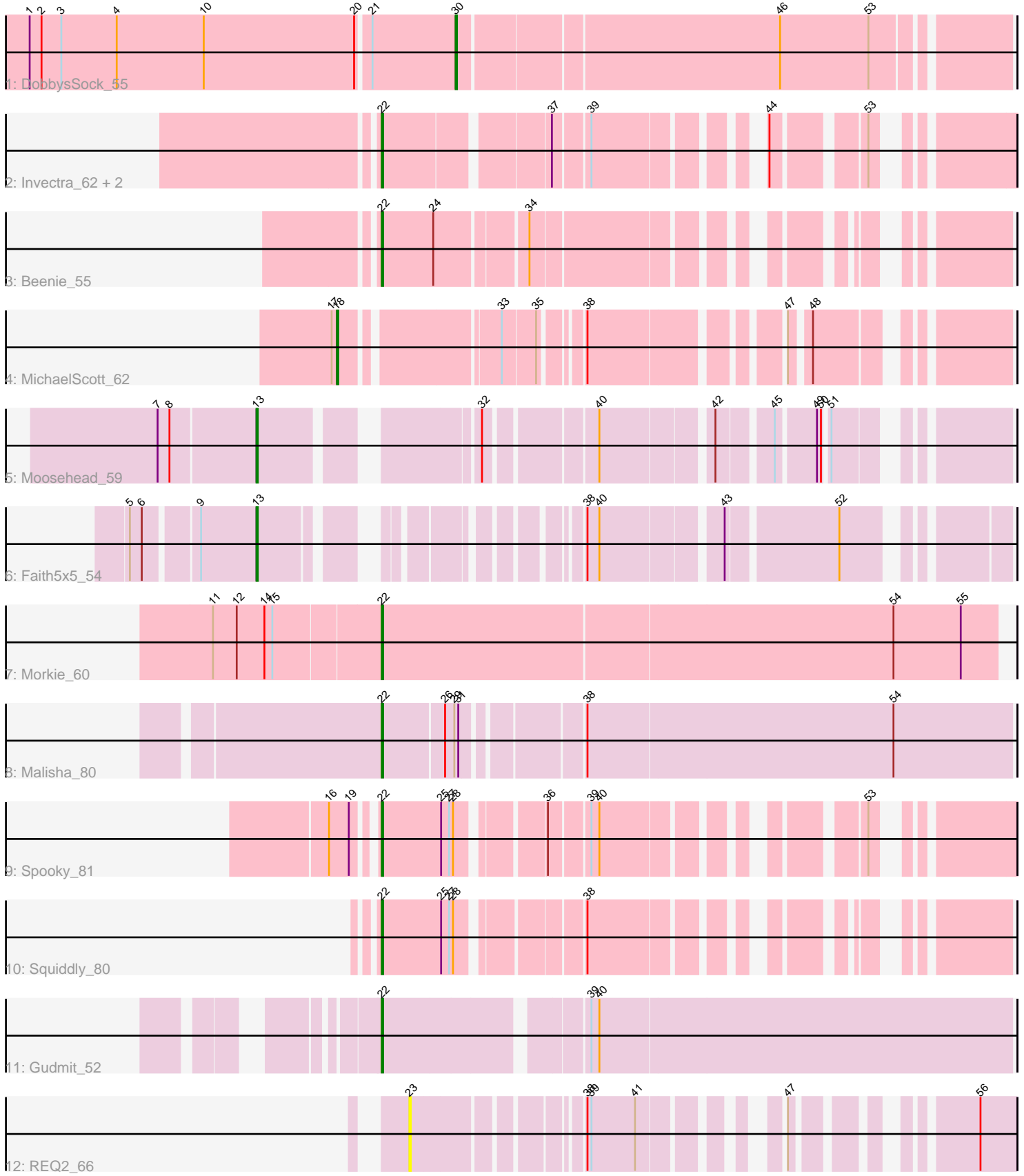# Pham 203439

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 203439 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203439 has 14 members, 2 are drafts.

Phages represented in each track:
• Track 1 : DobbysSock_55
• Track 2 : Invectra_62, Samman98_61, Clark_60
• Track 3 : Beenie_55
• Track 4 : MichaelScott_62
• Track 5 : Moosehead_59
• Track 6 : Faith5x5_54
• Track 7 : Morkie_60
• Track 8 : Malisha_80
• Track 9 : Spooky_81
• Track 10 : Squiddly_80
• Track 11 : Gudmit_52
• Track 12 : REQ2_66

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

The start number called the most often in the published annotations is 22, it was called in 8 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Beenie_55, Clark_60, Gudmit_52, Invectra_62, Malisha_80, Morkie_60, Samman98_61, Spooky_81, Squiddly_80,

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

Genes that do not have the "Most Annotated" start:
• DobbysSock_55, Faith5x5_54, MichaelScott_62, Moosehead_59, REQ2_66,

**Summary by start number:**

Start 13:
• Found in 2 of 14 ( 14.3% ) of genes in pham
• Manual Annotations of this start: 2 of 12
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Faith5x5_54 (CZ6), Moosehead_59 (CZ6),

Start 18:
• Found in 1 of 14 ( 7.1% ) of genes in pham
• Manual Annotations of this start: 1 of 12
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MichaelScott_62 (CZ4),

Start 22:
• Found in 9 of 14 ( 64.3% ) of genes in pham
• Manual Annotations of this start: 8 of 12
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beenie_55 (CZ4), Clark_60 (CZ4), Gudmit_52 (singleton), Invectra_62 (CZ4), Malisha_80 (DN), Morkie_60 (DH), Samman98_61 (CZ4), Spooky_81 (DN2), Squiddly_80 (DN2),

Start 23:
• Found in 1 of 14 ( 7.1% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: REQ2_66 (singleton),

Start 30:
• Found in 1 of 14 ( 7.1% ) of genes in pham
• Manual Annotations of this start: 1 of 12
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DobbysSock_55 (CZ4),

**Summary by clusters:**

There are 6 clusters represented in this pham: DN, singleton, DH, CZ6, CZ4, DN2,

Info for manual annotations of cluster CZ4:
•Start number 18 was manually annotated 1 time for cluster CZ4.
•Start number 22 was manually annotated 3 times for cluster CZ4.
•Start number 30 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ6:
•Start number 13 was manually annotated 2 times for cluster CZ6.

Info for manual annotations of cluster DH:
•Start number 22 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:
•Start number 22 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN2:
•Start number 22 was manually annotated 2 times for cluster DN2.

*Gene Information:*

Gene: Beenie_55 Start: 40138, Stop: 40506, Start Num: 22
Candidate Starts for Beenie_55:
(Start: 22 @40138 has 8 MA's), (24, 40177), (34, 40240),

Gene: Clark_60 Start: 39935, Stop: 40306, Start Num: 22
Candidate Starts for Clark_60:
(Start: 22 @39935 has 8 MA's), (37, 40049), (39, 40073), (44, 40169), (53, 40226),

Gene: DobbysSock_55 Start: 39516, Stop: 39908, Start Num: 30
Candidate Starts for DobbysSock_55:
(1, 39198), (2, 39207), (3, 39222), (4, 39264), (10, 39330), (20, 39444), (21, 39453), (Start: 30 @39516 has 1 MA's), (46, 39750), (53, 39816),

Gene: Faith5x5_54 Start: 34585, Stop: 35022, Start Num: 13
Candidate Starts for Faith5x5_54:
(5, 34498), (6, 34507), (9, 34543), (Start: 13 @34585 has 2 MA's), (38, 34756), (40, 34765), (43, 34846), (52, 34924),

Gene: Gudmit_52 Start: 32678, Stop: 33130, Start Num: 22
Candidate Starts for Gudmit_52:
(Start: 22 @32678 has 8 MA's), (39, 32816), (40, 32822),

Gene: Invectra_62 Start: 41508, Stop: 41879, Start Num: 22
Candidate Starts for Invectra_62:
(Start: 22 @41508 has 8 MA's), (37, 41622), (39, 41646), (44, 41742), (53, 41799),

Gene: Malisha_80 Start: 48865, Stop: 49314, Start Num: 22
Candidate Starts for Malisha_80:
(Start: 22 @48865 has 8 MA's), (26, 48910), (29, 48916), (31, 48919), (38, 48997), (54, 49225),

Gene: MichaelScott_62 Start: 41372, Stop: 41779, Start Num: 18
Candidate Starts for MichaelScott_62:
(17, 41369), (Start: 18 @41372 has 1 MA's), (33, 41477), (35, 41501), (38, 41525), (47, 41648), (48, 41660),

Gene: Moosehead_59 Start: 34924, Stop: 35379, Start Num: 13
Candidate Starts for Moosehead_59:
(7, 34852), (8, 34861), (Start: 13 @34924 has 2 MA's), (32, 35059), (40, 35131), (42, 35206), (45, 35242), (49, 35269), (50, 35272), (51, 35275),

Gene: Morkie_60 Start: 36373, Stop: 36831, Start Num: 22
Candidate Starts for Morkie_60:
(11, 36250), (12, 36268), (14, 36289), (15, 36295), (Start: 22 @36373 has 8 MA's), (54, 36754), (55, 36805),

Gene: REQ2_66 Start: 42263, Stop: 42595, Start Num: 23
Candidate Starts for REQ2_66:
(23, 42263), (38, 42368), (39, 42371), (41, 42404), (47, 42473), (56, 42569),

Gene: Samman98_61 Start: 40038, Stop: 40409, Start Num: 22
Candidate Starts for Samman98_61:
(Start: 22 @40038 has 8 MA's), (37, 40152), (39, 40176), (44, 40272), (53, 40329),

Gene: Spooky_81 Start: 46355, Stop: 46723, Start Num: 22
Candidate Starts for Spooky_81:
(16, 46328), (19, 46343), (Start: 22 @46355 has 8 MA's), (25, 46400), (27, 46406), (28, 46409), (36, 46463), (39, 46490), (40, 46496), (53, 46643),

Gene: Squiddly_80 Start: 48754, Stop: 49113, Start Num: 22
Candidate Starts for Squiddly_80:
(Start: 22 @48754 has 8 MA's), (25, 48799), (27, 48805), (28, 48808), (38, 48886),