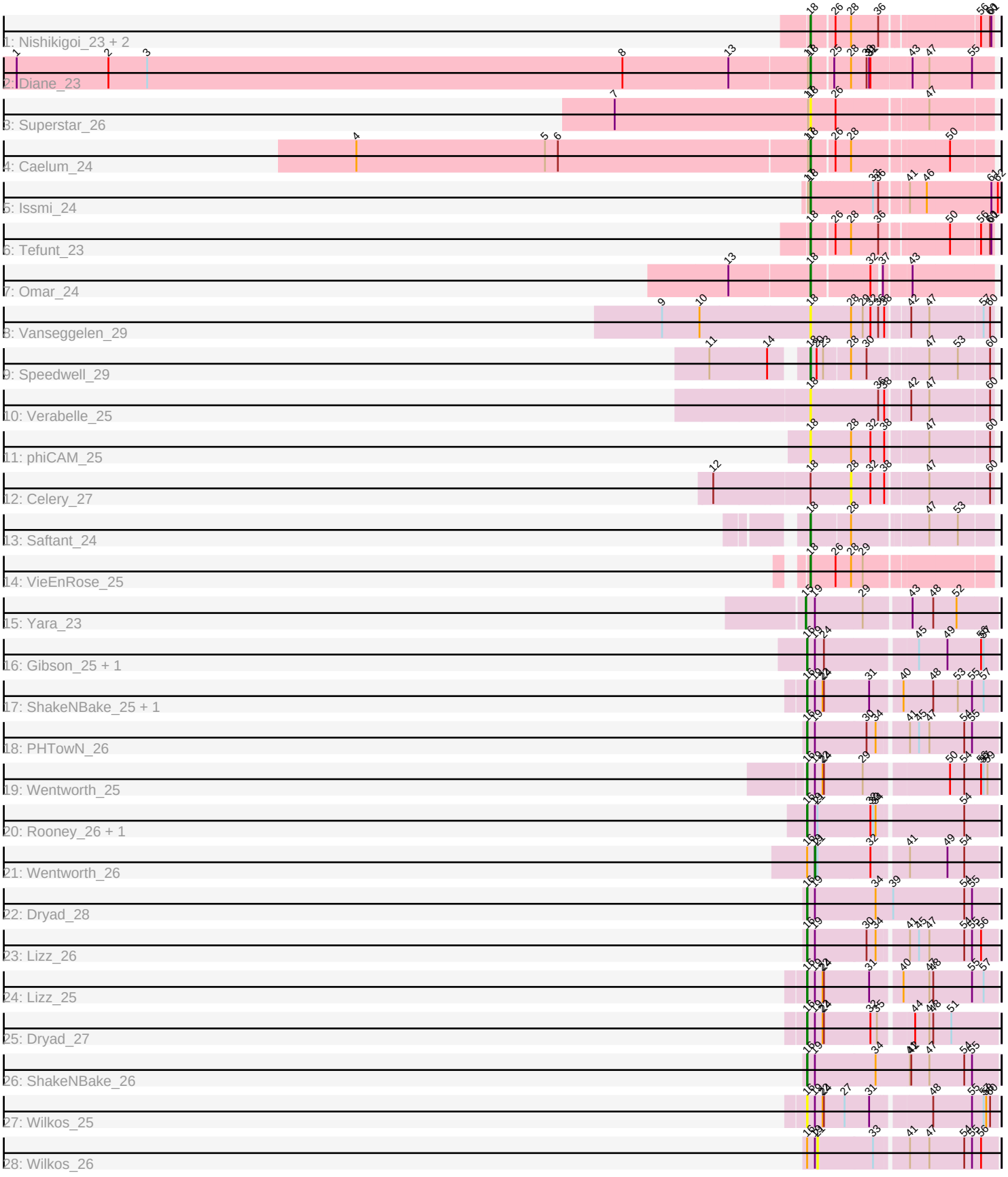
Pham 198256


1: Nishikigoi_23 + 2
2: Diane_23
3: Superstar_26
4: Caelum_24
5: Issmi_24
6: Tefunt_23
7: Omar_24
8: Vanseggelen_29
9: Speedwell_29
10: Verabelle_25
11: phiCAM_25
12: Celery_27
13: Saftant_24
14: VieEnRose_25
15: Yara_23
16: Gibson_25 + 1
17: ShakeNBake_25 + 1
18: PHTowN_26
19: Wentworth_25
20: Rooney_26 + 1
21: Wentworth_26
22: Dryad_28
23: Lizz_26
24: Lizz_25
25: Dryad_27
26: ShakeNBake_26
27: Wilkos_25
28: Wilkos_26

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 198256 Report

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

Pham number 198256 has 33 members, 7 are drafts.

Phages represented in each track:
- Track 1 : Nishikigoi_23, Amethyst_23, Haizum_23
- Track 2 : Diane_23
- Track 3 : Superstar_26
- Track 4 : Caelum_24
- Track 5 : Issmi_24
- Track 6 : Tefunt_23
- Track 7 : Omar_24
- Track 8 : Vanseggelen_29
- Track 9 : Speedwell_29
- Track 10 : Verabelle_25
- Track 11 : phiCAM_25
- Track 12 : Celery_27
- Track 13 : Saftant_24
- Track 14 : VieEnRose_25
- Track 15 : Yara_23
- Track 16 : Gibson_25, Rooney_25
- Track 17 : ShakeNBake_25, PHTowN_25
- Track 18 : PHTowN_26
- Track 19 : Wentworth_25
- Track 20 : Rooney_26, Gibson_26
- Track 21 : Wentworth_26
- Track 22 : Dryad_28
- Track 23 : Lizz_26
- Track 24 : Lizz_25
- Track 25 : Dryad_27
- Track 26 : ShakeNBake_26
- Track 27 : Wilkos_25
- Track 28 : Wilkos_26

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

The start number called the most often in the published annotations is 16, it was called in 13 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Dryad_27, Dryad_28, Gibson_25, Gibson_26, Lizz_25, Lizz_26, PHTowN_25, PHTowN_26, Rooney_25, Rooney_26, ShakeNBake_25, ShakeNBake_26, Wentworth_25, Wilkos_25,

Genes that have the "Most Annotated" start but do not call it:
• Wentworth_26, Wilkos_26,

Genes that do not have the "Most Annotated" start:
• Amethyst_23, Caelum_24, Celery_27, Diane_23, Haizum_23, Issmi_24, Nishikigoi_23, Omar_24, Saftant_24, Speedwell_29, Superstar_26, Tefunt_23, Vanseggelen_29, Verabelle_25, VieEnRose_25, Yara_23, phiCAM_25,

Summary by start number:

Start 15:
• Found in 1 of 33 (3.0%) of genes in pham
• Manual Annotations of this start: 1 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yara_23 (BN),

Start 16:
• Found in 16 of 33 (48.5%) of genes in pham
• Manual Annotations of this start: 13 of 26
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Dryad_27 (BN), Dryad_28 (BN), Gibson_25 (BN), Gibson_26 (BN), Lizz_25 (BN), Lizz_26 (BN), PHTowN_25 (BN), PHTowN_26 (BN), Rooney_25 (BN), Rooney_26 (BN), ShakeNBake_25 (BN), ShakeNBake_26 (BN), Wentworth_25 (BN), Wilkos_25 (BN),

Start 18:
• Found in 16 of 33 (48.5%) of genes in pham
• Manual Annotations of this start: 11 of 26
• Called 93.8% of time when present
• Phage (with cluster) where this start called: Amethyst_23 (BD2), Caelum_24 (BD2), Diane_23 (BD2), Haizum_23 (BD2), Issmi_24 (BD2), Nishikigoi_23 (BD2), Omar_24 (BD2), Saftant_24 (BD3), Speedwell_29 (BD3), Superstar_26 (BD2), Tefunt_23 (BD2), Vanseggelen_29 (BD3), Verabelle_25 (BD3), VieEnRose_25 (BD6), phiCAM_25 (BD3),

Start 19:
• Found in 17 of 33 (51.5%) of genes in pham
• Manual Annotations of this start: 1 of 26
• Called 5.9% of time when present
• Phage (with cluster) where this start called: Wentworth_26 (BN),

Start 21:
• Found in 4 of 33 (12.1%) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Wilkos_26 (BN),

Start 28:

• Found in 12 of 33 (36.4%) of genes in pham
• No Manual Annotations of this start.
• Called 8.3% of time when present
• Phage (with cluster) where this start called: Celery_27 (BD3),

Summary by clusters:

There are 4 clusters represented in this pham: BN, BD6, BD3, BD2,

Info for manual annotations of cluster BD2:
•Start number 18 was manually annotated 8 times for cluster BD2.

Info for manual annotations of cluster BD3:
•Start number 18 was manually annotated 2 times for cluster BD3.

Info for manual annotations of cluster BD6:
•Start number 18 was manually annotated 1 time for cluster BD6.

Info for manual annotations of cluster BN:
•Start number 15 was manually annotated 1 time for cluster BN.
•Start number 16 was manually annotated 13 times for cluster BN.
•Start number 19 was manually annotated 1 time for cluster BN.

Gene Information:

Gene: Amethyst_23 Start: 19487, Stop: 19861, Start Num: 18
Candidate Starts for Amethyst_23:
(Start: 18 @19487 has 11 MA's), (26, 19532), (28, 19568), (36, 19628), (56, 19832), (60, 19853), (61, 19856),

Gene: Caelum_24 Start: 19614, Stop: 19991, Start Num: 18
Candidate Starts for Caelum_24:
(4, 18576), (5, 19014), (6, 19044), (17, 19608), (Start: 18 @19614 has 11 MA's), (26, 19659), (28, 19695), (50, 19896),

Gene: Celery_27 Start: 20605, Stop: 20901, Start Num: 28
Candidate Starts for Celery_27:
(12, 20305), (Start: 18 @20515 has 11 MA's), (28, 20605), (32, 20647), (38, 20677), (47, 20761), (60, 20893),

Gene: Diane_23 Start: 19871, Stop: 20263, Start Num: 18
Candidate Starts for Diane_23:
(1, 18041), (2, 18254), (3, 18344), (8, 19448), (13, 19691), (17, 19865), (Start: 18 @19871 has 11 MA's), (25, 19913), (28, 19952), (30, 19985), (31, 19991), (32, 19994), (43, 20081), (47, 20120), (55, 20216),

Gene: Dryad_28 Start: 19324, Stop: 19755, Start Num: 16
Candidate Starts for Dryad_28:
(Start: 16 @19324 has 13 MA's), (Start: 19 @19342 has 1 MA's), (34, 19480), (39, 19519), (54, 19681), (55, 19699),

Gene: Dryad_27 Start: 18904, Stop: 19314, Start Num: 16
Candidate Starts for Dryad_27:
(Start: 16 @18904 has 13 MA's), (Start: 19 @18922 has 1 MA's), (22, 18940), (24, 18943), (32, 19048), (35, 19063), (44, 19126), (47, 19159), (48, 19168), (51, 19210),

Gene: Gibson_25 Start: 18596, Stop: 19006, Start Num: 16
Candidate Starts for Gibson_25:
(Start: 16 @18596 has 13 MA's), (Start: 19 @18614 has 1 MA's), (24, 18635), (45, 18827), (49, 18893), (56, 18968), (57, 18974),

Gene: Gibson_26 Start: 19017, Stop: 19430, Start Num: 16
Candidate Starts for Gibson_26:
(Start: 16 @19017 has 13 MA's), (Start: 19 @19035 has 1 MA's), (21, 19041), (32, 19161), (33, 19167), (34, 19173), (54, 19356),

Gene: Haizum_23 Start: 19509, Stop: 19883, Start Num: 18
Candidate Starts for Haizum_23:
(Start: 18 @19509 has 11 MA's), (26, 19554), (28, 19590), (36, 19650), (56, 19854), (60, 19875), (61, 19878),

Gene: Issmi_24 Start: 20233, Stop: 20640, Start Num: 18
Candidate Starts for Issmi_24:
(17, 20227), (Start: 18 @20233 has 11 MA's), (33, 20368), (36, 20380), (41, 20431), (46, 20470), (61, 20617), (62, 20632),

Gene: Lizz_26 Start: 18825, Stop: 19238, Start Num: 16
Candidate Starts for Lizz_26:
(Start: 16 @18825 has 13 MA's), (Start: 19 @18843 has 1 MA's), (30, 18960), (34, 18981), (41, 19038), (45, 19059), (47, 19083), (54, 19164), (55, 19182), (56, 19200),

Gene: Lizz_25 Start: 18405, Stop: 18815, Start Num: 16
Candidate Starts for Lizz_25:
(Start: 16 @18405 has 13 MA's), (Start: 19 @18423 has 1 MA's), (22, 18441), (24, 18444), (31, 18546), (40, 18606), (47, 18660), (48, 18669), (55, 18759), (57, 18783),

Gene: Nishikigoi_23 Start: 19509, Stop: 19883, Start Num: 18
Candidate Starts for Nishikigoi_23:
(Start: 18 @19509 has 11 MA's), (26, 19554), (28, 19590), (36, 19650), (56, 19854), (60, 19875), (61, 19878),

Gene: Omar_24 Start: 19908, Stop: 20285, Start Num: 18
Candidate Starts for Omar_24:
(13, 19728), (Start: 18 @19908 has 11 MA's), (32, 20031), (37, 20049), (43, 20103),

Gene: PHTowN_26 Start: 18825, Stop: 19238, Start Num: 16
Candidate Starts for PHTowN_26:
(Start: 16 @18825 has 13 MA's), (Start: 19 @18843 has 1 MA's), (30, 18960), (34, 18981), (41, 19038), (45, 19059), (47, 19083), (54, 19164), (55, 19182),

Gene: PHTowN_25 Start: 18405, Stop: 18815, Start Num: 16
Candidate Starts for PHTowN_25:
(Start: 16 @18405 has 13 MA's), (Start: 19 @18423 has 1 MA's), (22, 18441), (24, 18444), (31, 18546), (40, 18606), (48, 18669), (53, 18726), (55, 18759), (57, 18783),

Gene: Rooney_26 Start: 19014, Stop: 19427, Start Num: 16
Candidate Starts for Rooney_26:
(Start: 16 @19014 has 13 MA's), (Start: 19 @19032 has 1 MA's), (21, 19038), (32, 19158), (33, 19164), (34, 19170), (54, 19353),

Gene: Rooney_25 Start: 18593, Stop: 19003, Start Num: 16
Candidate Starts for Rooney_25:
(Start: 16 @18593 has 13 MA's), (Start: 19 @18611 has 1 MA's), (24, 18632), (45, 18824), (49, 18890), (56, 18965), (57, 18971),

Gene: Saftant_24 Start: 20799, Stop: 21173, Start Num: 18
Candidate Starts for Saftant_24:
(Start: 18 @20799 has 11 MA's), (28, 20880), (47, 21033), (53, 21096),

Gene: ShakeNBake_25 Start: 18405, Stop: 18815, Start Num: 16
Candidate Starts for ShakeNBake_25:
(Start: 16 @18405 has 13 MA's), (Start: 19 @18423 has 1 MA's), (22, 18441), (24, 18444), (31, 18546), (40, 18606), (48, 18669), (53, 18726), (55, 18759), (57, 18783),

Gene: ShakeNBake_26 Start: 18825, Stop: 19256, Start Num: 16
Candidate Starts for ShakeNBake_26:
(Start: 16 @18825 has 13 MA's), (Start: 19 @18843 has 1 MA's), (34, 18981), (41, 19056), (42, 19059), (47, 19101), (54, 19182), (55, 19200),

Gene: Speedwell_29 Start: 22006, Stop: 22380, Start Num: 18
Candidate Starts for Speedwell_29:
(11, 21811), (14, 21943), (Start: 18 @22006 has 11 MA's), (20, 22018), (23, 22033), (28, 22087), (30, 22120), (47, 22240), (53, 22303), (60, 22372),

Gene: Superstar_26 Start: 20776, Stop: 21162, Start Num: 18
Candidate Starts for Superstar_26:
(7, 20326), (17, 20770), (Start: 18 @20776 has 11 MA's), (26, 20830), (47, 21022),

Gene: Tefunt_23 Start: 19512, Stop: 19886, Start Num: 18
Candidate Starts for Tefunt_23:
(Start: 18 @19512 has 11 MA's), (26, 19557), (28, 19593), (36, 19653), (50, 19791), (56, 19857), (60, 19878), (61, 19881),

Gene: Vanseggelen_29 Start: 20234, Stop: 20620, Start Num: 18
Candidate Starts for Vanseggelen_29:
(9, 19895), (10, 19982), (Start: 18 @20234 has 11 MA's), (28, 20324), (29, 20348), (32, 20366), (36, 20384), (38, 20396), (42, 20438), (47, 20480), (57, 20597), (60, 20612),

Gene: Verabelle_25 Start: 20280, Stop: 20666, Start Num: 18
Candidate Starts for Verabelle_25:
(Start: 18 @20280 has 11 MA's), (36, 20430), (38, 20442), (42, 20484), (47, 20526), (60, 20658),

Gene: VieEnRose_25 Start: 19667, Stop: 20053, Start Num: 18
Candidate Starts for VieEnRose_25:
(Start: 18 @19667 has 11 MA's), (26, 19721), (28, 19757), (29, 19781),

Gene: Wentworth_25 Start: 18219, Stop: 18629, Start Num: 16

Candidate Starts for Wentworth_25:
(Start: 16 @18219 has 13 MA's), (Start: 19 @18237 has 1 MA's), (22, 18255), (24, 18258), (29, 18345), (50, 18522), (54, 18555), (56, 18591), (57, 18597), (59, 18606),

Gene: Wentworth_26 Start: 18658, Stop: 19056, Start Num: 19
Candidate Starts for Wentworth_26:
(Start: 16 @18640 has 13 MA's), (Start: 19 @18658 has 1 MA's), (21, 18664), (32, 18784), (41, 18856), (49, 18943), (54, 18982),

Gene: Wilkos_25 Start: 18352, Stop: 18765, Start Num: 16
Candidate Starts for Wilkos_25:
(Start: 16 @18352 has 13 MA's), (Start: 19 @18370 has 1 MA's), (22, 18388), (24, 18391), (27, 18439), (31, 18496), (48, 18619), (55, 18709), (57, 18733), (58, 18739), (60, 18748),

Gene: Wilkos_26 Start: 18799, Stop: 19188, Start Num: 21
Candidate Starts for Wilkos_26:
(Start: 16 @18775 has 13 MA's), (Start: 19 @18793 has 1 MA's), (21, 18799), (33, 18925), (41, 18988), (47, 19033), (54, 19114), (55, 19132), (56, 19150),

Gene: Yara_23 Start: 18446, Stop: 18862, Start Num: 15
Candidate Starts for Yara_23:
(Start: 15 @18446 has 1 MA's), (Start: 19 @18467 has 1 MA's), (29, 18575), (43, 18671), (48, 18719), (52, 18770),

Gene: phiCAM_25 Start: 22546, Stop: 22932, Start Num: 18
Candidate Starts for phiCAM_25:
(Start: 18 @22546 has 11 MA's), (28, 22636), (32, 22678), (38, 22708), (47, 22792), (60, 22924),