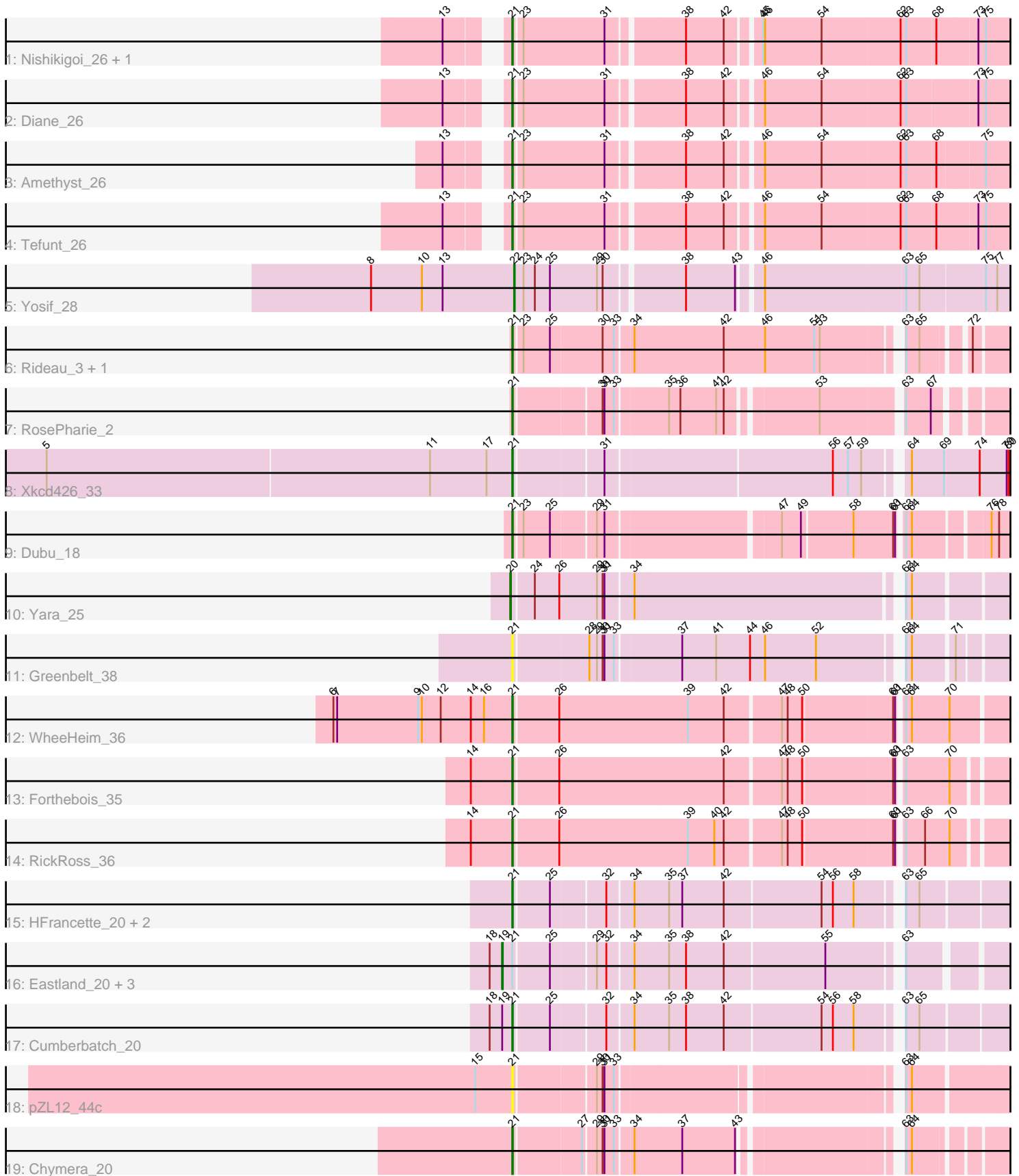


# Zoomed Pham 216479



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 216479 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216479 has 26 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Nishikigoi\_26, Haizum\_26
- Track 2 : Diane\_26
- Track 3 : Amethyst\_26
- Track 4 : Tefunt\_26
- Track 5 : Yosif\_28
- Track 6 : Rideau\_3, Dennebes\_2
- Track 7 : RosePharie\_2
- Track 8 : Xkcd426\_33
- Track 9 : Dubu\_18
- Track 10 : Yara\_25
- Track 11 : Greenbelt\_38
- Track 12 : WheeHeim\_36
- Track 13 : Forthebois\_35
- Track 14 : RickRoss\_36
- Track 15 : HFrancette\_20, Ignacio\_20, Vondra\_20
- Track 16 : Eastland\_20, AxeJC\_20, Eklok\_20, Piccadilly\_20
- Track 17 : Cumberbatch\_20
- Track 18 : pZL12\_44c
- Track 19 : Chymera\_20

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

The start number called the most often in the published annotations is 21, it was called in 17 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amethyst\_26, Chymera\_20, Cumberbatch\_20, Dennebes\_2, Diane\_26, Dubu\_18, Forthebois\_35, Greenbelt\_38, HFrancette\_20, Haizum\_26, Ignacio\_20, Nishikigoi\_26, RickRoss\_36, Rideau\_3, RosePharie\_2, Tefunt\_26, Vondra\_20, WheeHeim\_36, Xkcd426\_33, pZL12\_44c,

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

- AxeJC\_20, Eastland\_20, Eklok\_20, Piccadilly\_20,

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

- Yara\_25, Yosif\_28,

### Summary by start number:

Start 19:

- Found in 5 of 26 ( 19.2% ) of genes in pham
- Manual Annotations of this start: 4 of 23
- Called 80.0% of time when present
- Phage (with cluster) where this start called: AxeJC\_20 (BP), Eastland\_20 (BP), Eklok\_20 (BP), Piccadilly\_20 (BP),

Start 20:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yara\_25 (BN),

Start 21:

- Found in 24 of 26 ( 92.3% ) of genes in pham
- Manual Annotations of this start: 17 of 23
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Amethyst\_26 (BD2), Chymera\_20 (singleton), Cumberbatch\_20 (BP), Dennebes\_2 (BF), Diane\_26 (BD2), Dubu\_18 (BJ), Forthebois\_35 (BO), Greenbelt\_38 (BN), HFrancette\_20 (BP), Haizum\_26 (BD2), Ignacio\_20 (BP), Nishikigoi\_26 (BD2), RickRoss\_36 (BO), Rideau\_3 (BF), RosePharie\_2 (BF), Tefunt\_26 (BD2), Vondra\_20 (BP), WheeHeim\_36 (BO), Xkcd426\_33 (BG), pZL12\_44c (singleton),

Start 22:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yosif\_28 (BD3),

### Summary by clusters:

There are 9 clusters represented in this pham: BF, BG, BN, BO, singleton, BJ, BP, BD3, BD2,

Info for manual annotations of cluster BD2:

- Start number 21 was manually annotated 5 times for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 22 was manually annotated 1 time for cluster BD3.

Info for manual annotations of cluster BF:

- Start number 21 was manually annotated 2 times for cluster BF.

Info for manual annotations of cluster BG:

- Start number 21 was manually annotated 1 time for cluster BG.

Info for manual annotations of cluster BJ:

- Start number 21 was manually annotated 1 time for cluster BJ.

Info for manual annotations of cluster BN:

- Start number 20 was manually annotated 1 time for cluster BN.

Info for manual annotations of cluster BO:

- Start number 21 was manually annotated 3 times for cluster BO.

Info for manual annotations of cluster BP:

- Start number 19 was manually annotated 4 times for cluster BP.
- Start number 21 was manually annotated 4 times for cluster BP.

### **Gene Information:**

Gene: Amethyst\_26 Start: 21581, Stop: 22531, Start Num: 21

Candidate Starts for Amethyst\_26:

(13, 21512), (Start: 21 @21581 has 17 MA's), (23, 21593), (31, 21722), (38, 21833), (42, 21893), (46, 21941), (54, 22031), (62, 22154), (63, 22163), (68, 22208), (75, 22280),

Gene: AxeJC\_20 Start: 16979, Stop: 17923, Start Num: 19

Candidate Starts for AxeJC\_20:

(18, 16961), (Start: 19 @16979 has 4 MA's), (Start: 21 @16994 has 17 MA's), (25, 17048), (29, 17114), (32, 17129), (34, 17165), (35, 17219), (38, 17246), (42, 17306), (55, 17462), (63, 17561), (85, 17750), (89, 17849),

Gene: Chymera\_20 Start: 16278, Stop: 17153, Start Num: 21

Candidate Starts for Chymera\_20:

(Start: 21 @16278 has 17 MA's), (27, 16380), (29, 16398), (30, 16407), (31, 16410), (33, 16425), (34, 16449), (37, 16524), (43, 16608), (63, 16827), (64, 16836), (83, 16989), (84, 16992),

Gene: Cumberbatch\_20 Start: 16995, Stop: 17939, Start Num: 21

Candidate Starts for Cumberbatch\_20:

(18, 16962), (Start: 19 @16980 has 4 MA's), (Start: 21 @16995 has 17 MA's), (25, 17049), (32, 17130), (34, 17166), (35, 17220), (38, 17247), (42, 17307), (54, 17457), (56, 17475), (58, 17508), (63, 17562), (65, 17583), (85, 17766),

Gene: Dennebes\_2 Start: 2618, Stop: 3529, Start Num: 21

Candidate Starts for Dennebes\_2:

(Start: 21 @2618 has 17 MA's), (23, 2630), (25, 2672), (30, 2753), (33, 2771), (34, 2795), (42, 2936), (46, 3002), (51, 3080), (53, 3089), (63, 3197), (65, 3218), (72, 3278), (82, 3344),

Gene: Diane\_26 Start: 21914, Stop: 22867, Start Num: 21

Candidate Starts for Diane\_26:

(13, 21845), (Start: 21 @21914 has 17 MA's), (23, 21926), (31, 22055), (38, 22166), (42, 22226), (46, 22274), (54, 22364), (62, 22487), (63, 22496), (73, 22604), (75, 22616),

Gene: Dubu\_18 Start: 16543, Stop: 17481, Start Num: 21

Candidate Starts for Dubu\_18:

(Start: 21 @16543 has 17 MA's), (23, 16555), (25, 16597), (29, 16663), (31, 16675), (47, 16930), (49, 16960), (58, 17038), (60, 17101), (61, 17104), (63, 17110), (64, 17119), (76, 17227), (78, 17239),

Gene: Eastland\_20 Start: 16964, Stop: 17908, Start Num: 19

Candidate Starts for Eastland\_20:

(18, 16946), (Start: 19 @16964 has 4 MA's), (Start: 21 @16979 has 17 MA's), (25, 17033), (29, 17099), (32, 17114), (34, 17150), (35, 17204), (38, 17231), (42, 17291), (55, 17447), (63, 17546), (85, 17735), (89, 17834),

Gene: Eklok\_20 Start: 16979, Stop: 17923, Start Num: 19

Candidate Starts for Eklok\_20:

(18, 16961), (Start: 19 @16979 has 4 MA's), (Start: 21 @16994 has 17 MA's), (25, 17048), (29, 17114), (32, 17129), (34, 17165), (35, 17219), (38, 17246), (42, 17306), (55, 17462), (63, 17561), (85, 17750), (89, 17849),

Gene: Forthebois\_35 Start: 16763, Stop: 17539, Start Num: 21

Candidate Starts for Forthebois\_35:

(14, 16697), (Start: 21 @16763 has 17 MA's), (26, 16832), (42, 17090), (47, 17174), (48, 17183), (50, 17204), (60, 17342), (61, 17345), (63, 17351), (70, 17420),

Gene: Greenbelt\_38 Start: 19143, Stop: 20069, Start Num: 21

Candidate Starts for Greenbelt\_38:

(Start: 21 @19143 has 17 MA's), (28, 19257), (29, 19269), (30, 19278), (31, 19281), (33, 19296), (37, 19395), (41, 19449), (44, 19503), (46, 19527), (52, 19608), (63, 19722), (64, 19731), (71, 19791), (82, 19878),

Gene: HFrancette\_20 Start: 17010, Stop: 17954, Start Num: 21

Candidate Starts for HFrancette\_20:

(Start: 21 @17010 has 17 MA's), (25, 17064), (32, 17145), (34, 17181), (35, 17235), (37, 17256), (42, 17322), (54, 17472), (56, 17490), (58, 17523), (63, 17577), (65, 17598), (85, 17781),

Gene: Haizum\_26 Start: 21588, Stop: 22541, Start Num: 21

Candidate Starts for Haizum\_26:

(13, 21519), (Start: 21 @21588 has 17 MA's), (23, 21600), (31, 21729), (38, 21840), (42, 21900), (45, 21945), (46, 21948), (54, 22038), (62, 22161), (63, 22170), (68, 22215), (73, 22278), (75, 22290),

Gene: Ignacio\_20 Start: 17010, Stop: 17954, Start Num: 21

Candidate Starts for Ignacio\_20:

(Start: 21 @17010 has 17 MA's), (25, 17064), (32, 17145), (34, 17181), (35, 17235), (37, 17256), (42, 17322), (54, 17472), (56, 17490), (58, 17523), (63, 17577), (65, 17598), (85, 17781),

Gene: Nishikigoi\_26 Start: 21588, Stop: 22541, Start Num: 21

Candidate Starts for Nishikigoi\_26:

(13, 21519), (Start: 21 @21588 has 17 MA's), (23, 21600), (31, 21729), (38, 21840), (42, 21900), (45, 21945), (46, 21948), (54, 22038), (62, 22161), (63, 22170), (68, 22215), (73, 22278), (75, 22290),

Gene: Piccadilly\_20 Start: 16963, Stop: 17907, Start Num: 19

Candidate Starts for Piccadilly\_20:

(18, 16945), (Start: 19 @16963 has 4 MA's), (Start: 21 @16978 has 17 MA's), (25, 17032), (29, 17098), (32, 17113), (34, 17149), (35, 17203), (38, 17230), (42, 17290), (55, 17446), (63, 17545), (85, 17734), (89, 17833),

Gene: RickRoss\_36 Start: 16891, Stop: 17667, Start Num: 21

Candidate Starts for RickRoss\_36:

(14, 16825), (Start: 21 @16891 has 17 MA's), (26, 16960), (39, 17161), (40, 17203), (42, 17218), (47, 17302), (48, 17311), (50, 17332), (60, 17470), (61, 17473), (63, 17479), (66, 17509), (70, 17548),

Gene: Rideau\_3 Start: 2618, Stop: 3529, Start Num: 21

Candidate Starts for Rideau\_3:

(Start: 21 @2618 has 17 MA's), (23, 2630), (25, 2672), (30, 2753), (33, 2771), (34, 2795), (42, 2936), (46, 3002), (51, 3080), (53, 3089), (63, 3197), (65, 3218), (72, 3278), (82, 3344),

Gene: RosePharie\_2 Start: 2633, Stop: 3526, Start Num: 21

Candidate Starts for RosePharie\_2:

(Start: 21 @2633 has 17 MA's), (30, 2762), (31, 2765), (33, 2780), (35, 2858), (36, 2876), (41, 2933), (42, 2945), (53, 3074), (63, 3191), (67, 3230), (84, 3353),

Gene: Tefunt\_26 Start: 21591, Stop: 22544, Start Num: 21

Candidate Starts for Tefunt\_26:

(13, 21522), (Start: 21 @21591 has 17 MA's), (23, 21603), (31, 21732), (38, 21843), (42, 21903), (46, 21951), (54, 22041), (62, 22164), (63, 22173), (68, 22218), (73, 22281), (75, 22293),

Gene: Vondra\_20 Start: 17009, Stop: 17959, Start Num: 21

Candidate Starts for Vondra\_20:

(Start: 21 @17009 has 17 MA's), (25, 17063), (32, 17144), (34, 17180), (35, 17234), (37, 17255), (42, 17321), (54, 17471), (56, 17489), (58, 17522), (63, 17576), (65, 17597), (85, 17786),

Gene: WheeHeim\_36 Start: 16771, Stop: 17556, Start Num: 21

Candidate Starts for WheeHeim\_36:

(6, 16486), (7, 16492), (9, 16621), (10, 16627), (12, 16657), (14, 16705), (16, 16726), (Start: 21 @16771 has 17 MA's), (26, 16840), (39, 17041), (42, 17098), (47, 17182), (48, 17191), (50, 17212), (60, 17350), (61, 17353), (63, 17359), (64, 17368), (70, 17428), (81, 17521),

Gene: Xkcd426\_33 Start: 33252, Stop: 34259, Start Num: 21

Candidate Starts for Xkcd426\_33:

(1, 32271), (2, 32316), (3, 32346), (4, 32418), (5, 32517), (11, 33123), (17, 33213), (Start: 21 @33252 has 17 MA's), (31, 33384), (56, 33729), (57, 33753), (59, 33774), (64, 33825), (69, 33876), (74, 33930), (79, 33972), (80, 33975), (87, 34053), (88, 34062),

Gene: Yara\_25 Start: 19303, Stop: 20226, Start Num: 20

Candidate Starts for Yara\_25:

(Start: 20 @19303 has 1 MA's), (24, 19333), (26, 19372), (29, 19429), (30, 19438), (31, 19441), (34, 19480), (63, 19879), (64, 19888), (82, 20041),

Gene: Yosif\_28 Start: 22917, Stop: 23870, Start Num: 22

Candidate Starts for Yosif\_28:

(8, 22689), (10, 22770), (13, 22803), (Start: 22 @22917 has 1 MA's), (23, 22932), (24, 22950), (25, 22974), (29, 23049), (30, 23058), (38, 23172), (43, 23250), (46, 23280), (63, 23496), (65, 23517), (75, 23619), (77, 23637), (86, 23721),

Gene: pZL12\_44c Start: 32427, Stop: 31489, Start Num: 21

Candidate Starts for pZL12\_44c:

(15, 32484), (Start: 21 @32427 has 17 MA's), (29, 32307), (30, 32298), (31, 32295), (33, 32280), (63, 31875), (64, 31866),