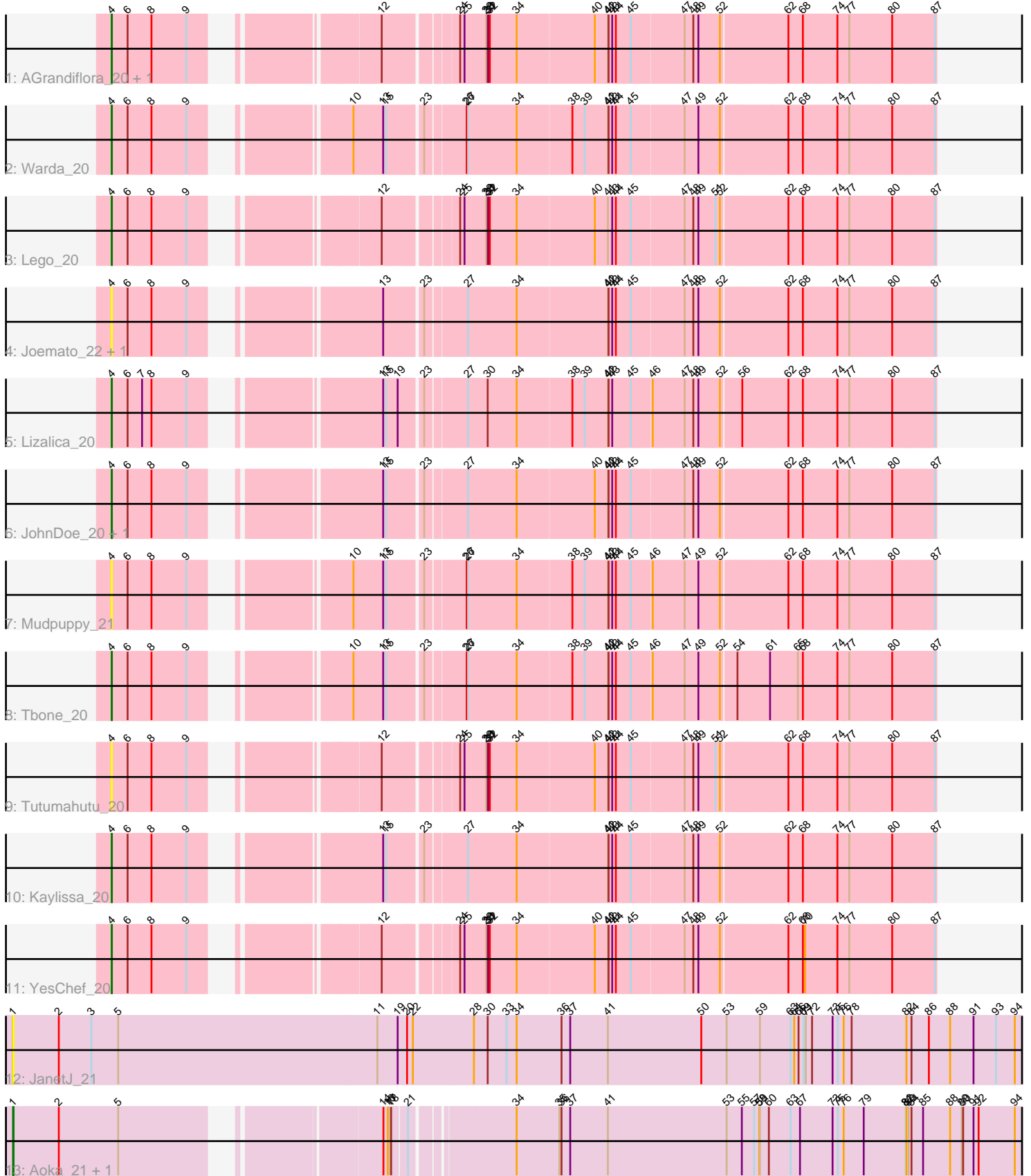


Pham 163979



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 163979 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163979 has 17 members, 8 are drafts.

Phages represented in each track:

- Track 1 : AGrandiflora\_20, Powerpuff\_20
- Track 2 : Warda\_20
- Track 3 : Lego\_20
- Track 4 : Joemato\_22, Simpson\_22
- Track 5 : Lizalica\_20
- Track 6 : JohnDoe\_20, Cyan\_20
- Track 7 : Mudpuppy\_21
- Track 8 : Tbone\_20
- Track 9 : Tutumahutu\_20
- Track 10 : Kaylissa\_20
- Track 11 : YesChef\_20
- Track 12 : JanetJ\_21
- Track 13 : Aoka\_21, EvenBluerMoon\_27

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

The start number called the most often in the published annotations is 4, it was called in 8 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AGrandiflora\_20, Cyan\_20, Joemato\_22, JohnDoe\_20, Kaylissa\_20, Lego\_20, Lizalica\_20, Mudpuppy\_21, Powerpuff\_20, Simpson\_22, Tbone\_20, Tutumahutu\_20, Warda\_20, YesChef\_20,

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

- 

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

- Aoka\_21, EvenBluerMoon\_27, JanetJ\_21,

### **Summary by start number:**

Start 1:

- Found in 3 of 17 ( 17.6% ) of genes in pham

- Manual Annotations of this start: 1 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aoka\_21 (FO), EvenBluerMoon\_27 (FO), JanetJ\_21 (FO),

Start 4:

- Found in 14 of 17 ( 82.4% ) of genes in pham
- Manual Annotations of this start: 8 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AGrandiflora\_20 (AZ1), Cyan\_20 (AZ1), Joemato\_22 (AZ1), JohnDoe\_20 (AZ1), Kaylissa\_20 (AZ1), Lego\_20 (AZ1), Lizalica\_20 (AZ1), Mudpuppy\_21 (AZ1), Powerpuff\_20 (AZ1), Simpson\_22 (AZ1), Tbone\_20 (AZ1), Tutumahutu\_20 (AZ1), Warda\_20 (AZ1), YesChef\_20 (AZ1),

### Summary by clusters:

There are 2 clusters represented in this pham: AZ1, FO,

Info for manual annotations of cluster AZ1:

- Start number 4 was manually annotated 8 times for cluster AZ1.

Info for manual annotations of cluster FO:

- Start number 1 was manually annotated 1 time for cluster FO.

### Gene Information:

Gene: AGrandiflora\_20 Start: 16043, Stop: 19015, Start Num: 4

Candidate Starts for AGrandiflora\_20:

(Start: 4 @16043 has 8 MA's), (6, 16106), (8, 16190), (9, 16334), (12, 16928), (24, 17159), (25, 17177), (29, 17255), (30, 17261), (31, 17264), (32, 17270), (34, 17381), (40, 17693), (41, 17747), (42, 17750), (43, 17765), (44, 17780), (45, 17840), (47, 18041), (48, 18071), (49, 18092), (52, 18173), (62, 18425), (68, 18485), (74, 18626), (77, 18671), (80, 18842), (87, 19010),

Gene: Aoka\_21 Start: 17080, Stop: 21027, Start Num: 1

Candidate Starts for Aoka\_21:

(Start: 1 @17080 has 1 MA's), (2, 17269), (5, 17515), (14, 18409), (16, 18427), (17, 18433), (18, 18439), (21, 18490), (34, 18856), (35, 19021), (36, 19030), (37, 19066), (41, 19222), (53, 19714), (55, 19777), (57, 19828), (58, 19849), (59, 19852), (60, 19888), (63, 19978), (67, 20017), (73, 20149), (75, 20170), (76, 20194), (79, 20275), (81, 20449), (82, 20452), (83, 20461), (84, 20473), (85, 20521), (88, 20632), (89, 20680), (90, 20686), (91, 20725), (92, 20746), (94, 20896),

Gene: Cyan\_20 Start: 16046, Stop: 19063, Start Num: 4

Candidate Starts for Cyan\_20:

(Start: 4 @16046 has 8 MA's), (6, 16109), (8, 16193), (9, 16337), (13, 16955), (15, 16967), (23, 17087), (27, 17237), (34, 17429), (40, 17741), (41, 17795), (42, 17798), (43, 17813), (44, 17828), (45, 17888), (47, 18089), (48, 18119), (49, 18140), (52, 18221), (62, 18473), (68, 18533), (74, 18674), (77, 18719), (80, 18890), (87, 19058),

Gene: EvenBluerMoon\_27 Start: 17115, Stop: 21062, Start Num: 1

Candidate Starts for EvenBluerMoon\_27:

(Start: 1 @17115 has 1 MA's), (2, 17304), (5, 17550), (14, 18444), (16, 18462), (17, 18468), (18, 18474), (21, 18525), (34, 18891), (35, 19056), (36, 19065), (37, 19101), (41, 19257), (53, 19749), (55, 19812), (57, 19863), (58, 19884), (59, 19887), (60, 19923), (63, 20013), (67, 20052), (73, 20184), (75, 20205), (76, 20229), (79, 20310), (81, 20484), (82, 20487), (83, 20496), (84, 20508), (85, 20556), (88, 20667), (89, 20715), (90, 20721), (91, 20760), (92, 20781), (94, 20931),

Gene: JanetJ\_21 Start: 16898, Stop: 21157, Start Num: 1

Candidate Starts for JanetJ\_21:

(Start: 1 @16898 has 1 MA's), (2, 17087), (3, 17222), (5, 17333), (11, 18398), (19, 18482), (20, 18521), (22, 18545), (28, 18797), (30, 18854), (33, 18932), (34, 18974), (36, 19160), (37, 19196), (41, 19352), (50, 19739), (53, 19844), (59, 19982), (63, 20108), (64, 20123), (66, 20141), (69, 20162), (71, 20171), (72, 20195), (73, 20279), (75, 20300), (76, 20324), (78, 20357), (82, 20582), (84, 20603), (86, 20675), (88, 20762), (91, 20858), (93, 20948), (94, 21026),

Gene: Joemato\_22 Start: 16046, Stop: 19063, Start Num: 4

Candidate Starts for Joemato\_22:

(Start: 4 @16046 has 8 MA's), (6, 16109), (8, 16193), (9, 16337), (13, 16955), (23, 17087), (27, 17237), (34, 17429), (41, 17795), (42, 17798), (43, 17813), (44, 17828), (45, 17888), (47, 18089), (48, 18119), (49, 18140), (52, 18221), (62, 18473), (68, 18533), (74, 18674), (77, 18719), (80, 18890), (87, 19058),

Gene: JohnDoe\_20 Start: 16041, Stop: 19058, Start Num: 4

Candidate Starts for JohnDoe\_20:

(Start: 4 @16041 has 8 MA's), (6, 16104), (8, 16188), (9, 16332), (13, 16950), (15, 16962), (23, 17082), (27, 17232), (34, 17424), (40, 17736), (41, 17790), (42, 17793), (43, 17808), (44, 17823), (45, 17883), (47, 18084), (48, 18114), (49, 18135), (52, 18216), (62, 18468), (68, 18528), (74, 18669), (77, 18714), (80, 18885), (87, 19053),

Gene: Kaylissa\_20 Start: 16047, Stop: 19064, Start Num: 4

Candidate Starts for Kaylissa\_20:

(Start: 4 @16047 has 8 MA's), (6, 16110), (8, 16194), (9, 16338), (13, 16956), (15, 16968), (23, 17088), (27, 17238), (34, 17430), (41, 17796), (42, 17799), (43, 17814), (44, 17829), (45, 17889), (47, 18090), (48, 18120), (49, 18141), (52, 18222), (62, 18474), (68, 18534), (74, 18675), (77, 18720), (80, 18891), (87, 19059),

Gene: Lego\_20 Start: 16046, Stop: 19018, Start Num: 4

Candidate Starts for Lego\_20:

(Start: 4 @16046 has 8 MA's), (6, 16109), (8, 16193), (9, 16337), (12, 16931), (24, 17162), (25, 17180), (29, 17258), (30, 17264), (31, 17267), (32, 17273), (34, 17384), (40, 17696), (41, 17750), (43, 17768), (44, 17783), (45, 17843), (47, 18044), (48, 18074), (49, 18095), (51, 18158), (52, 18176), (62, 18428), (68, 18488), (74, 18629), (77, 18674), (80, 18845), (87, 19013),

Gene: Lizalica\_20 Start: 16031, Stop: 19048, Start Num: 4

Candidate Starts for Lizalica\_20:

(Start: 4 @16031 has 8 MA's), (6, 16094), (7, 16148), (8, 16178), (9, 16322), (13, 16940), (15, 16952), (19, 16997), (23, 17072), (27, 17222), (30, 17294), (34, 17414), (38, 17633), (39, 17684), (41, 17780), (42, 17783), (43, 17798), (45, 17873), (46, 17951), (47, 18074), (48, 18104), (49, 18125), (52, 18206), (56, 18278), (62, 18458), (68, 18518), (74, 18659), (77, 18704), (80, 18875), (87, 19043),

Gene: Mudpuppy\_21 Start: 16045, Stop: 19062, Start Num: 4

Candidate Starts for Mudpuppy\_21:

(Start: 4 @16045 has 8 MA's), (6, 16108), (8, 16192), (9, 16336), (10, 16837), (13, 16954), (15, 16966), (23, 17086), (26, 17230), (27, 17236), (34, 17428), (38, 17647), (39, 17698), (41, 17794), (42,

17797), (43, 17812), (44, 17827), (45, 17887), (46, 17965), (47, 18088), (49, 18139), (52, 18220), (62, 18472), (68, 18532), (74, 18673), (77, 18718), (80, 18889), (87, 19057),

Gene: Powerpuff\_20 Start: 16097, Stop: 19069, Start Num: 4

Candidate Starts for Powerpuff\_20:

(Start: 4 @16097 has 8 MA's), (6, 16160), (8, 16244), (9, 16388), (12, 16982), (24, 17213), (25, 17231), (29, 17309), (30, 17315), (31, 17318), (32, 17324), (34, 17435), (40, 17747), (41, 17801), (42, 17804), (43, 17819), (44, 17834), (45, 17894), (47, 18095), (48, 18125), (49, 18146), (52, 18227), (62, 18479), (68, 18539), (74, 18680), (77, 18725), (80, 18896), (87, 19064),

Gene: Simpson\_22 Start: 16046, Stop: 19063, Start Num: 4

Candidate Starts for Simpson\_22:

(Start: 4 @16046 has 8 MA's), (6, 16109), (8, 16193), (9, 16337), (13, 16955), (23, 17087), (27, 17237), (34, 17429), (41, 17795), (42, 17798), (43, 17813), (44, 17828), (45, 17888), (47, 18089), (48, 18119), (49, 18140), (52, 18221), (62, 18473), (68, 18533), (74, 18674), (77, 18719), (80, 18890), (87, 19058),

Gene: Tbone\_20 Start: 16050, Stop: 19067, Start Num: 4

Candidate Starts for Tbone\_20:

(Start: 4 @16050 has 8 MA's), (6, 16113), (8, 16197), (9, 16341), (10, 16842), (13, 16959), (15, 16971), (23, 17091), (26, 17235), (27, 17241), (34, 17433), (38, 17652), (39, 17703), (41, 17799), (42, 17802), (43, 17817), (44, 17832), (45, 17892), (46, 17970), (47, 18093), (49, 18144), (52, 18225), (54, 18279), (61, 18402), (65, 18516), (68, 18537), (74, 18678), (77, 18723), (80, 18894), (87, 19062),

Gene: Tutumahutu\_20 Start: 16097, Stop: 19069, Start Num: 4

Candidate Starts for Tutumahutu\_20:

(Start: 4 @16097 has 8 MA's), (6, 16160), (8, 16244), (9, 16388), (12, 16982), (24, 17213), (25, 17231), (29, 17309), (30, 17315), (31, 17318), (32, 17324), (34, 17435), (40, 17747), (41, 17801), (42, 17804), (43, 17819), (44, 17834), (45, 17894), (47, 18095), (48, 18125), (49, 18146), (51, 18209), (52, 18227), (62, 18479), (68, 18539), (74, 18680), (77, 18725), (80, 18896), (87, 19064),

Gene: Warda\_20 Start: 16042, Stop: 19059, Start Num: 4

Candidate Starts for Warda\_20:

(Start: 4 @16042 has 8 MA's), (6, 16105), (8, 16189), (9, 16333), (10, 16834), (13, 16951), (15, 16963), (23, 17083), (26, 17227), (27, 17233), (34, 17425), (38, 17644), (39, 17695), (41, 17791), (42, 17794), (43, 17809), (44, 17824), (45, 17884), (47, 18085), (49, 18136), (52, 18217), (62, 18469), (68, 18529), (74, 18670), (77, 18715), (80, 18886), (87, 19054),

Gene: YesChef\_20 Start: 16097, Stop: 19069, Start Num: 4

Candidate Starts for YesChef\_20:

(Start: 4 @16097 has 8 MA's), (6, 16160), (8, 16244), (9, 16388), (12, 16982), (24, 17213), (25, 17231), (29, 17309), (30, 17315), (31, 17318), (32, 17324), (34, 17435), (40, 17747), (41, 17801), (42, 17804), (43, 17819), (44, 17834), (45, 17894), (47, 18095), (48, 18125), (49, 18146), (52, 18227), (62, 18479), (68, 18539), (70, 18548), (74, 18680), (77, 18725), (80, 18896), (87, 19064),