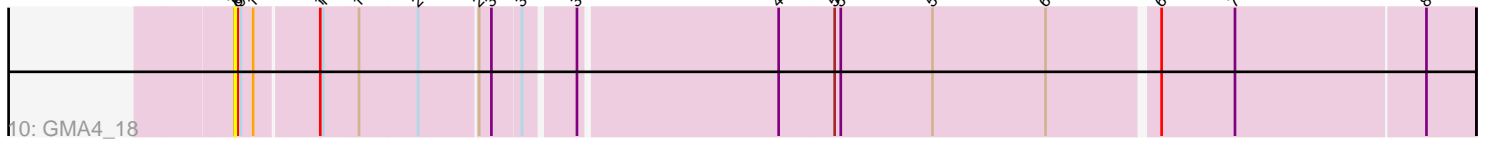
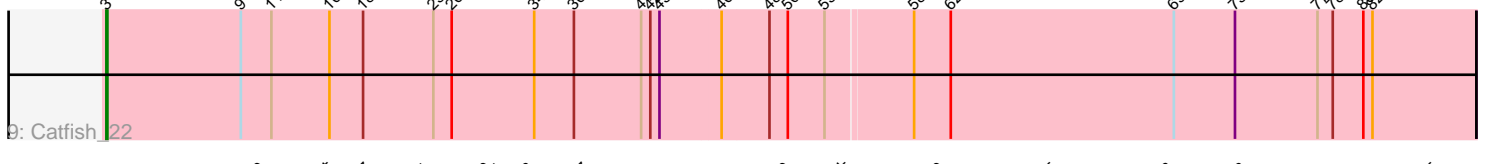
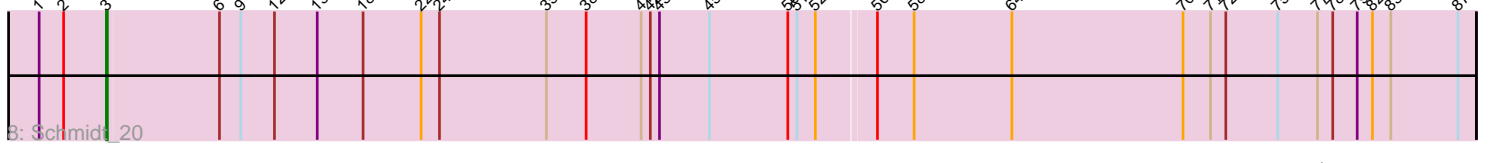
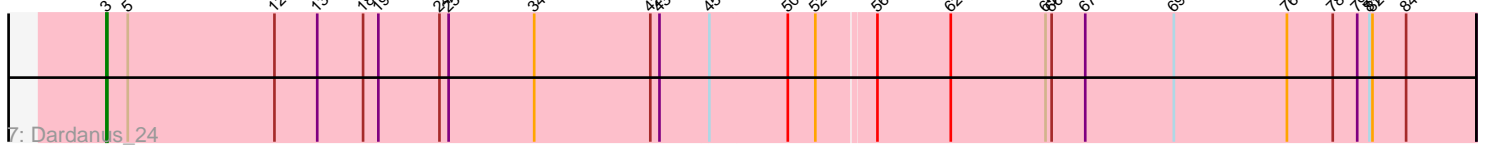
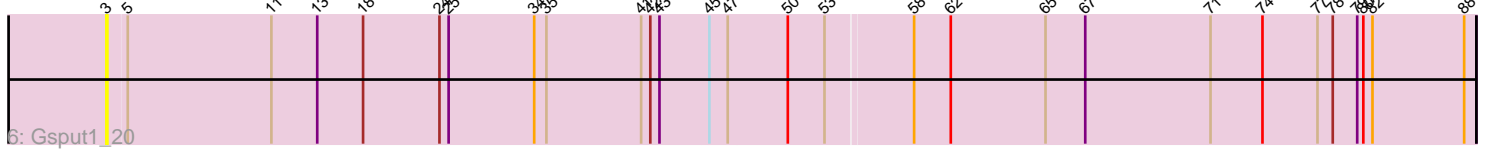
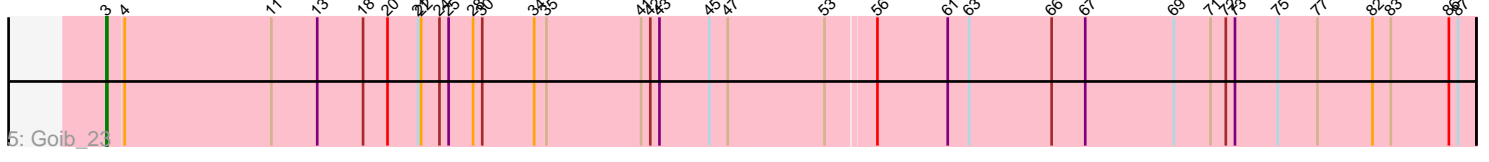
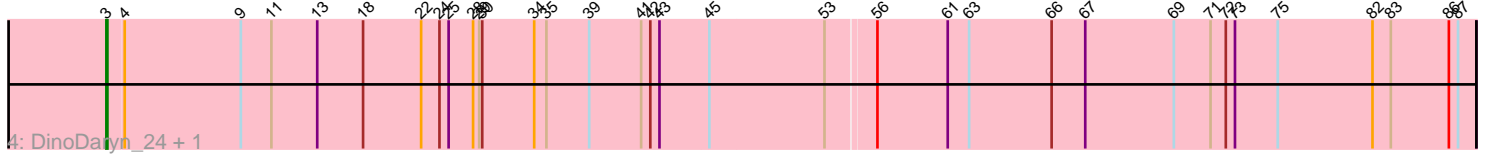
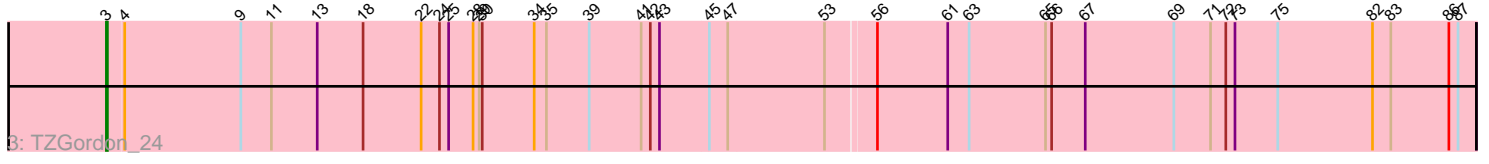
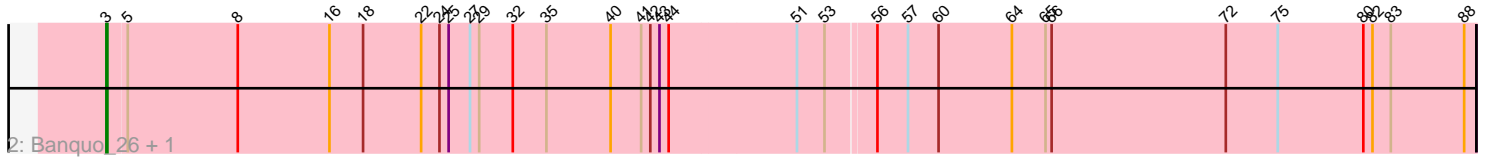
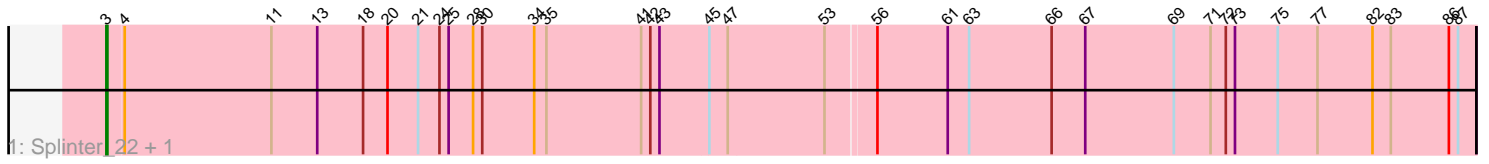


# Pham 168660



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 168660 Report

This analysis was run 07/09/24 on database version 566.

Pham number 168660 has 13 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Splinter\_22, Vendetta\_22
- Track 2 : Banquo\_26, TinaLin\_25
- Track 3 : TZGordon\_24
- Track 4 : DinoDaryn\_24, Huffy\_24
- Track 5 : Goib\_23
- Track 6 : Gsput1\_20
- Track 7 : Dardanus\_24
- Track 8 : Schmidt\_20
- Track 9 : Catfish\_22
- Track 10 : GMA4\_18

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

The start number called the most often in the published annotations is 3, it was called in 11 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Banquo\_26, Catfish\_22, Dardanus\_24, DinoDaryn\_24, Goib\_23, Gsput1\_20, Huffy\_24, Schmidt\_20, Splinter\_22, TZGordon\_24, TinaLin\_25, Vendetta\_22,

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

- 

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

- GMA4\_18,

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

Start 3:

- Found in 12 of 13 ( 92.3% ) of genes in pham
- Manual Annotations of this start: 11 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Banquo\_26 (CU1), Catfish\_22 (CU5), Dardanus\_24 (CU3), DinoDaryn\_24 (CU1), Goib\_23 (CU1), Gsput1\_20 (CU2),

Huffy\_24 (CU1), Schmidt\_20 (CU4), Splinter\_22 (CU1), TZGordon\_24 (CU1), TinaLin\_25 (CU1), Vendetta\_22 (CU1),

Start 7:

- Found in 1 of 13 ( 7.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA4\_18 (singleton),

### **Summary by clusters:**

There are 6 clusters represented in this pham: CU5, CU4, CU3, CU2, CU1, singleton,

Info for manual annotations of cluster CU1:

- Start number 3 was manually annotated 8 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 3 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 3 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 3 was manually annotated 1 time for cluster CU5.

### **Gene Information:**

Gene: Banquo\_26 Start: 17827, Stop: 19155, Start Num: 3

Candidate Starts for Banquo\_26:

(Start: 3 @17827 has 11 MA's), (5, 17845), (8, 17953), (16, 18043), (18, 18076), (22, 18133), (24, 18151), (25, 18160), (27, 18181), (29, 18190), (32, 18223), (35, 18256), (40, 18319), (41, 18349), (42, 18358), (43, 18367), (44, 18376), (51, 18496), (53, 18523), (56, 18568), (57, 18598), (60, 18628), (64, 18700), (65, 18733), (66, 18739), (72, 18910), (75, 18961), (80, 19045), (82, 19054), (83, 19072), (88, 19144),

Gene: Catfish\_22 Start: 18471, Stop: 19802, Start Num: 3

Candidate Starts for Catfish\_22:

(Start: 3 @18471 has 11 MA's), (9, 18603), (11, 18633), (16, 18690), (18, 18723), (23, 18792), (26, 18810), (34, 18891), (36, 18930), (41, 18996), (42, 19005), (43, 19014), (46, 19071), (48, 19116), (50, 19134), (53, 19170), (58, 19251), (62, 19287), (69, 19506), (73, 19566), (77, 19647), (78, 19662), (80, 19692), (82, 19701),

Gene: Dardanus\_24 Start: 16682, Stop: 18013, Start Num: 3

Candidate Starts for Dardanus\_24:

(Start: 3 @16682 has 11 MA's), (5, 16703), (12, 16847), (13, 16889), (18, 16934), (19, 16949), (24, 17009), (25, 17018), (34, 17102), (42, 17216), (43, 17225), (45, 17270), (50, 17345), (52, 17372), (56, 17426), (62, 17498), (65, 17591), (66, 17597), (67, 17630), (69, 17717), (76, 17828), (78, 17873), (79, 17897), (81, 17909), (82, 17912), (84, 17945),

Gene: DinoDaryn\_24 Start: 16702, Stop: 18030, Start Num: 3

Candidate Starts for DinoDaryn\_24:

(Start: 3 @16702 has 11 MA's), (4, 16717), (9, 16831), (11, 16861), (13, 16906), (18, 16951), (22, 17008), (24, 17026), (25, 17035), (28, 17059), (29, 17065), (30, 17068), (34, 17119), (35, 17131), (39, 17173), (41, 17224), (42, 17233), (43, 17242), (45, 17287), (53, 17398), (56, 17443), (61, 17512), (63, 17533), (66, 17614), (67, 17647), (69, 17734), (71, 17770), (72, 17785), (73, 17794), (75, 17836), (82, 17929), (83, 17947), (86, 18004), (87, 18013),

Gene: GMA4\_18 Start: 16957, Stop: 18117, Start Num: 7

Candidate Starts for GMA4\_18:

(7, 16957), (8, 16960), (9, 16963), (10, 16972), (14, 17032), (15, 17035), (17, 17068), (21, 17125), (29, 17179), (31, 17191), (33, 17218), (37, 17263), (49, 17452), (54, 17506), (55, 17512), (59, 17602), (65, 17713), (68, 17815), (73, 17887), (85, 18070),

Gene: Goib\_23 Start: 16480, Stop: 17808, Start Num: 3

Candidate Starts for Goib\_23:

(Start: 3 @16480 has 11 MA's), (4, 16495), (11, 16639), (13, 16684), (18, 16729), (20, 16753), (21, 16783), (22, 16786), (24, 16804), (25, 16813), (28, 16837), (30, 16846), (34, 16897), (35, 16909), (41, 17002), (42, 17011), (43, 17020), (45, 17065), (47, 17083), (53, 17176), (56, 17221), (61, 17290), (63, 17311), (66, 17392), (67, 17425), (69, 17512), (71, 17548), (72, 17563), (73, 17572), (75, 17614), (77, 17653), (82, 17707), (83, 17725), (86, 17782), (87, 17791),

Gene: Gspu1\_20 Start: 15750, Stop: 17078, Start Num: 3

Candidate Starts for Gspu1\_20:

(Start: 3 @15750 has 11 MA's), (5, 15768), (11, 15909), (13, 15954), (18, 15999), (24, 16074), (25, 16083), (34, 16167), (35, 16179), (41, 16272), (42, 16281), (43, 16290), (45, 16335), (47, 16353), (50, 16410), (53, 16446), (58, 16527), (62, 16563), (65, 16656), (67, 16695), (71, 16818), (74, 16869), (77, 16923), (78, 16938), (79, 16962), (80, 16968), (82, 16977), (88, 17067),

Gene: Huffy\_24 Start: 16702, Stop: 18030, Start Num: 3

Candidate Starts for Huffy\_24:

(Start: 3 @16702 has 11 MA's), (4, 16717), (9, 16831), (11, 16861), (13, 16906), (18, 16951), (22, 17008), (24, 17026), (25, 17035), (28, 17059), (29, 17065), (30, 17068), (34, 17119), (35, 17131), (39, 17173), (41, 17224), (42, 17233), (43, 17242), (45, 17287), (53, 17398), (56, 17443), (61, 17512), (63, 17533), (66, 17614), (67, 17647), (69, 17734), (71, 17770), (72, 17785), (73, 17794), (75, 17836), (82, 17929), (83, 17947), (86, 18004), (87, 18013),

Gene: Schmidt\_20 Start: 14705, Stop: 16033, Start Num: 3

Candidate Starts for Schmidt\_20:

(1, 14639), (2, 14663), (Start: 3 @14705 has 11 MA's), (6, 14813), (9, 14834), (12, 14867), (13, 14909), (18, 14954), (22, 15011), (24, 15029), (35, 15134), (38, 15173), (41, 15227), (42, 15236), (43, 15245), (45, 15290), (50, 15365), (51, 15374), (52, 15392), (56, 15446), (58, 15482), (64, 15578), (70, 15746), (71, 15773), (72, 15788), (75, 15839), (77, 15878), (78, 15893), (79, 15917), (82, 15932), (83, 15950), (87, 16016),

Gene: Splinter\_22 Start: 16480, Stop: 17808, Start Num: 3

Candidate Starts for Splinter\_22:

(Start: 3 @16480 has 11 MA's), (4, 16495), (11, 16639), (13, 16684), (18, 16729), (20, 16753), (21, 16783), (24, 16804), (25, 16813), (28, 16837), (30, 16846), (34, 16897), (35, 16909), (41, 17002), (42, 17011), (43, 17020), (45, 17065), (47, 17083), (53, 17176), (56, 17221), (61, 17290), (63, 17311), (66, 17392), (67, 17425), (69, 17512), (71, 17548), (72, 17563), (73, 17572), (75, 17614), (77, 17653), (82, 17707), (83, 17725), (86, 17782), (87, 17791),

Gene: TZGordon\_24 Start: 16619, Stop: 17947, Start Num: 3

Candidate Starts for TZGordon\_24:

(Start: 3 @16619 has 11 MA's), (4, 16634), (9, 16748), (11, 16778), (13, 16823), (18, 16868), (22, 16925), (24, 16943), (25, 16952), (28, 16976), (29, 16982), (30, 16985), (34, 17036), (35, 17048), (39, 17090), (41, 17141), (42, 17150), (43, 17159), (45, 17204), (47, 17222), (53, 17315), (56, 17360), (61, 17429), (63, 17450), (65, 17525), (66, 17531), (67, 17564), (69, 17651), (71, 17687), (72, 17702), (73, 17711), (75, 17753), (82, 17846), (83, 17864), (86, 17921), (87, 17930),

Gene: TinaLin\_25 Start: 17451, Stop: 18779, Start Num: 3

Candidate Starts for TinaLin\_25:

(Start: 3 @17451 has 11 MA's), (5, 17469), (8, 17577), (16, 17667), (18, 17700), (22, 17757), (24, 17775), (25, 17784), (27, 17805), (29, 17814), (32, 17847), (35, 17880), (40, 17943), (41, 17973), (42, 17982), (43, 17991), (44, 18000), (51, 18120), (53, 18147), (56, 18192), (57, 18222), (60, 18252), (64, 18324), (65, 18357), (66, 18363), (72, 18534), (75, 18585), (80, 18669), (82, 18678), (83, 18696), (88, 18768),

Gene: Vendetta\_22 Start: 16480, Stop: 17808, Start Num: 3

Candidate Starts for Vendetta\_22:

(Start: 3 @16480 has 11 MA's), (4, 16495), (11, 16639), (13, 16684), (18, 16729), (20, 16753), (21, 16783), (24, 16804), (25, 16813), (28, 16837), (30, 16846), (34, 16897), (35, 16909), (41, 17002), (42, 17011), (43, 17020), (45, 17065), (47, 17083), (53, 17176), (56, 17221), (61, 17290), (63, 17311), (66, 17392), (67, 17425), (69, 17512), (71, 17548), (72, 17563), (73, 17572), (75, 17614), (77, 17653), (82, 17707), (83, 17725), (86, 17782), (87, 17791),