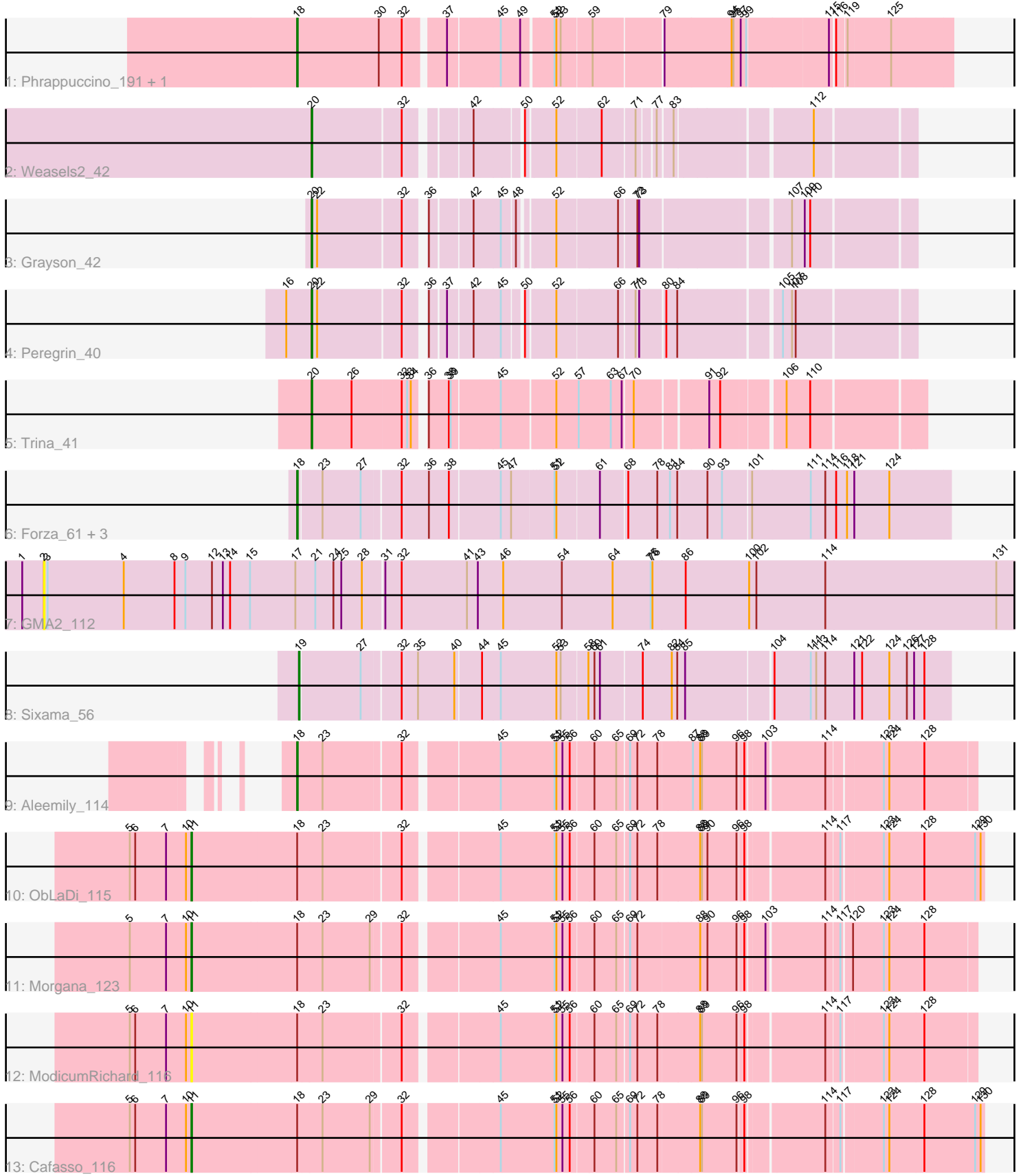


# Pham 163081



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 163081 Report

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

Pham number 163081 has 17 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Phrappuccino\_191, Settecandela\_216
- Track 2 : Weasels2\_42
- Track 3 : Grayson\_42
- Track 4 : Peregrin\_40
- Track 5 : Trina\_41
- Track 6 : Forza\_61, BlueNGold\_60, Boopy\_62, Mareelih\_60
- Track 7 : GMA2\_112
- Track 8 : Sixama\_56
- Track 9 : Aleemily\_114
- Track 10 : ObLaDi\_115
- Track 11 : Morgana\_123
- Track 12 : ModicumRichard\_116
- Track 13 : Cafasso\_116

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

The start number called the most often in the published annotations is 18, it was called in 7 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aleemily\_114, BlueNGold\_60, Boopy\_62, Forza\_61, Mareelih\_60, Phrappuccino\_191, Settecandela\_216,

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

- Cafasso\_116, ModicumRichard\_116, Morgana\_123, ObLaDi\_115,

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

- GMA2\_112, Grayson\_42, Peregrin\_40, Sixama\_56, Trina\_41, Weasels2\_42,

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

Start 2:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- No Manual Annotations of this start.

- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA2\_112 (DS),

Start 11:

- Found in 4 of 17 ( 23.5% ) of genes in pham
- Manual Annotations of this start: 3 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cafasso\_116 (DZ), ModicumRichard\_116 (DZ), Morgana\_123 (DZ), ObLaDi\_115 (DZ),

Start 18:

- Found in 11 of 17 ( 64.7% ) of genes in pham
- Manual Annotations of this start: 7 of 15
- Called 63.6% of time when present
- Phage (with cluster) where this start called: Aleemily\_114 (DZ), BlueNGold\_60 (DS), Boopy\_62 (DS), Forza\_61 (DS), Mareelih\_60 (DS), Phrappuccino\_191 (AA), Settecandela\_216 (AA),

Start 19:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sixama\_56 (DS),

Start 20:

- Found in 4 of 17 ( 23.5% ) of genes in pham
- Manual Annotations of this start: 4 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson\_42 (CB), Peregrin\_40 (CB), Trina\_41 (CE), Weasels2\_42 (CB),

### **Summary by clusters:**

There are 5 clusters represented in this pham: AA, CB, DZ, DS, CE,

Info for manual annotations of cluster AA:

- Start number 18 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster CB:

- Start number 20 was manually annotated 3 times for cluster CB.

Info for manual annotations of cluster CE:

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

Info for manual annotations of cluster DS:

- Start number 18 was manually annotated 4 times for cluster DS.
- Start number 19 was manually annotated 1 time for cluster DS.

Info for manual annotations of cluster DZ:

- Start number 11 was manually annotated 3 times for cluster DZ.
- Start number 18 was manually annotated 1 time for cluster DZ.

### **Gene Information:**

Gene: Aleemily\_114 Start: 63942, Stop: 62920, Start Num: 18

Candidate Starts for Aleemily\_114:

(Start: 18 @63942 has 7 MA's), (23, 63903), (32, 63783), (45, 63648), (51, 63561), (52, 63558), (55, 63549), (56, 63537), (60, 63501), (65, 63465), (69, 63447), (72, 63435), (78, 63402), (87, 63348), (88, 63336), (89, 63333), (96, 63276), (98, 63267), (103, 63240), (114, 63150), (123, 63066), (124, 63057), (128, 63003),

Gene: BlueNGold\_60 Start: 23425, Stop: 22415, Start Num: 18

Candidate Starts for BlueNGold\_60:

(Start: 18 @23425 has 7 MA's), (23, 23389), (27, 23326), (32, 23269), (36, 23227), (38, 23194), (45, 23116), (47, 23101), (51, 23038), (52, 23035), (61, 22969), (68, 22927), (78, 22879), (81, 22861), (84, 22849), (90, 22804), (93, 22780), (101, 22735), (111, 22639), (114, 22615), (116, 22597), (118, 22579), (121, 22567), (124, 22510),

Gene: Boopy\_62 Start: 23437, Stop: 22427, Start Num: 18

Candidate Starts for Boopy\_62:

(Start: 18 @23437 has 7 MA's), (23, 23401), (27, 23338), (32, 23281), (36, 23239), (38, 23206), (45, 23128), (47, 23113), (51, 23050), (52, 23047), (61, 22981), (68, 22939), (78, 22891), (81, 22873), (84, 22861), (90, 22816), (93, 22792), (101, 22747), (111, 22651), (114, 22627), (116, 22609), (118, 22591), (121, 22579), (124, 22522),

Gene: Cafasso\_116 Start: 64579, Stop: 63371, Start Num: 11

Candidate Starts for Cafasso\_116:

(5, 64681), (6, 64672), (7, 64621), (10, 64588), (Start: 11 @64579 has 3 MA's), (Start: 18 @64408 has 7 MA's), (23, 64369), (29, 64291), (32, 64249), (45, 64114), (51, 64027), (52, 64024), (55, 64015), (56, 64003), (60, 63967), (65, 63931), (69, 63913), (72, 63901), (78, 63868), (88, 63802), (89, 63799), (96, 63742), (98, 63733), (114, 63616), (117, 63595), (123, 63532), (124, 63523), (128, 63469), (129, 63385), (130, 63376),

Gene: Forza\_61 Start: 23353, Stop: 22343, Start Num: 18

Candidate Starts for Forza\_61:

(Start: 18 @23353 has 7 MA's), (23, 23317), (27, 23254), (32, 23197), (36, 23155), (38, 23122), (45, 23044), (47, 23029), (51, 22966), (52, 22963), (61, 22897), (68, 22855), (78, 22807), (81, 22789), (84, 22777), (90, 22732), (93, 22708), (101, 22663), (111, 22567), (114, 22543), (116, 22525), (118, 22507), (121, 22495), (124, 22438),

Gene: GMA2\_112 Start: 97174, Stop: 95579, Start Num: 2

Candidate Starts for GMA2\_112:

(1, 97210), (2, 97174), (3, 97168), (4, 97042), (8, 96958), (9, 96940), (12, 96898), (13, 96880), (14, 96868), (15, 96835), (17, 96760), (21, 96727), (24, 96697), (25, 96685), (28, 96652), (31, 96619), (32, 96592), (41, 96484), (43, 96466), (46, 96424), (54, 96328), (64, 96244), (75, 96181), (76, 96178), (86, 96124), (100, 96019), (102, 96007), (114, 95893), (131, 95611),

Gene: Grayson\_42 Start: 14061, Stop: 13180, Start Num: 20

Candidate Starts for Grayson\_42:

(Start: 20 @14061 has 4 MA's), (22, 14052), (32, 13920), (36, 13896), (42, 13833), (45, 13791), (48, 13773), (52, 13722), (66, 13626), (72, 13599), (73, 13596), (107, 13371), (109, 13350), (110, 13341),

Gene: Mareelih\_60 Start: 22855, Stop: 21845, Start Num: 18

Candidate Starts for Mareelih\_60:

(Start: 18 @22855 has 7 MA's), (23, 22819), (27, 22756), (32, 22699), (36, 22657), (38, 22624), (45, 22546), (47, 22531), (51, 22468), (52, 22465), (61, 22399), (68, 22357), (78, 22309), (81, 22291), (84, 22279), (90, 22234), (93, 22210), (101, 22165), (111, 22069), (114, 22045), (116, 22027), (118, 22009), (121, 21997), (124, 21940),

Gene: ModicumRichard\_116 Start: 64867, Stop: 63674, Start Num: 11

Candidate Starts for ModicumRichard\_116:

(5, 64969), (6, 64960), (7, 64909), (10, 64876), (Start: 11 @64867 has 3 MA's), (Start: 18 @64696 has 7 MA's), (23, 64657), (32, 64537), (45, 64402), (51, 64315), (52, 64312), (55, 64303), (56, 64291), (60, 64255), (65, 64219), (69, 64201), (72, 64189), (78, 64156), (88, 64090), (89, 64087), (96, 64030), (98, 64021), (114, 63904), (117, 63883), (123, 63820), (124, 63811), (128, 63757),

Gene: Morgana\_123 Start: 67037, Stop: 65844, Start Num: 11

Candidate Starts for Morgana\_123:

(5, 67139), (7, 67079), (10, 67046), (Start: 11 @67037 has 3 MA's), (Start: 18 @66866 has 7 MA's), (23, 66827), (29, 66749), (32, 66707), (45, 66572), (51, 66485), (52, 66482), (55, 66473), (56, 66461), (60, 66425), (65, 66389), (69, 66371), (72, 66359), (88, 66260), (90, 66248), (96, 66200), (98, 66191), (103, 66164), (114, 66074), (117, 66053), (120, 66038), (123, 65990), (124, 65981), (128, 65927),

Gene: ObLaDi\_115 Start: 64269, Stop: 63061, Start Num: 11

Candidate Starts for ObLaDi\_115:

(5, 64371), (6, 64362), (7, 64311), (10, 64278), (Start: 11 @64269 has 3 MA's), (Start: 18 @64098 has 7 MA's), (23, 64059), (32, 63939), (45, 63804), (51, 63717), (52, 63714), (55, 63705), (56, 63693), (60, 63657), (65, 63621), (69, 63603), (72, 63591), (78, 63558), (88, 63492), (89, 63489), (90, 63480), (96, 63432), (98, 63423), (114, 63306), (117, 63285), (123, 63222), (124, 63213), (128, 63159), (129, 63075), (130, 63066),

Gene: Peregrin\_40 Start: 13375, Stop: 12494, Start Num: 20

Candidate Starts for Peregrin\_40:

(16, 13417), (Start: 20 @13375 has 4 MA's), (22, 13366), (32, 13234), (36, 13210), (37, 13186), (42, 13147), (45, 13105), (50, 13081), (52, 13036), (66, 12940), (71, 12916), (73, 12910), (80, 12871), (84, 12853), (105, 12700), (107, 12685), (108, 12679),

Gene: Phrappuccino\_191 Start: 121514, Stop: 122515, Start Num: 18

Candidate Starts for Phrappuccino\_191:

(Start: 18 @121514 has 7 MA's), (30, 121649), (32, 121685), (37, 121742), (45, 121823), (49, 121853), (51, 121901), (52, 121904), (53, 121910), (59, 121958), (79, 122066), (94, 122174), (95, 122177), (97, 122189), (99, 122198), (115, 122327), (116, 122333), (119, 122348), (125, 122417),

Gene: Settecandela\_216 Start: 130361, Stop: 131362, Start Num: 18

Candidate Starts for Settecandela\_216:

(Start: 18 @130361 has 7 MA's), (30, 130496), (32, 130532), (37, 130589), (45, 130670), (49, 130700), (51, 130748), (52, 130751), (53, 130757), (59, 130805), (79, 130913), (94, 131021), (95, 131024), (97, 131036), (99, 131045), (115, 131174), (116, 131180), (119, 131195), (125, 131264),

Gene: Sixama\_56 Start: 21776, Stop: 20772, Start Num: 19

Candidate Starts for Sixama\_56:

(Start: 19 @21776 has 1 MA's), (27, 21680), (32, 21623), (35, 21599), (40, 21539), (44, 21500), (45, 21470), (52, 21383), (53, 21377), (58, 21335), (60, 21326), (61, 21317), (74, 21251), (82, 21203), (84, 21194), (85, 21185), (104, 21053), (111, 20996), (113, 20987), (114, 20972), (121, 20924), (122, 20912), (124, 20867), (126, 20840), (127, 20828), (128, 20813),

Gene: Trina\_41 Start: 15743, Stop: 14823, Start Num: 20

Candidate Starts for Trina\_41:

(Start: 20 @15743 has 4 MA's), (26, 15677), (32, 15599), (33, 15593), (34, 15587), (36, 15575), (38, 15542), (39, 15539), (45, 15464), (52, 15380), (57, 15344), (63, 15293), (67, 15275), (70, 15260), (91, 15149), (92, 15131), (106, 15038), (110, 14999),

Gene: Weasels2\_42 Start: 14381, Stop: 13518, Start Num: 20

Candidate Starts for Weasels2\_42:

(Start: 20 @14381 has 4 MA's), (32, 14240), (42, 14153), (50, 14087), (52, 14042), (62, 13973), (71, 13922), (77, 13898), (83, 13877), (112, 13673),