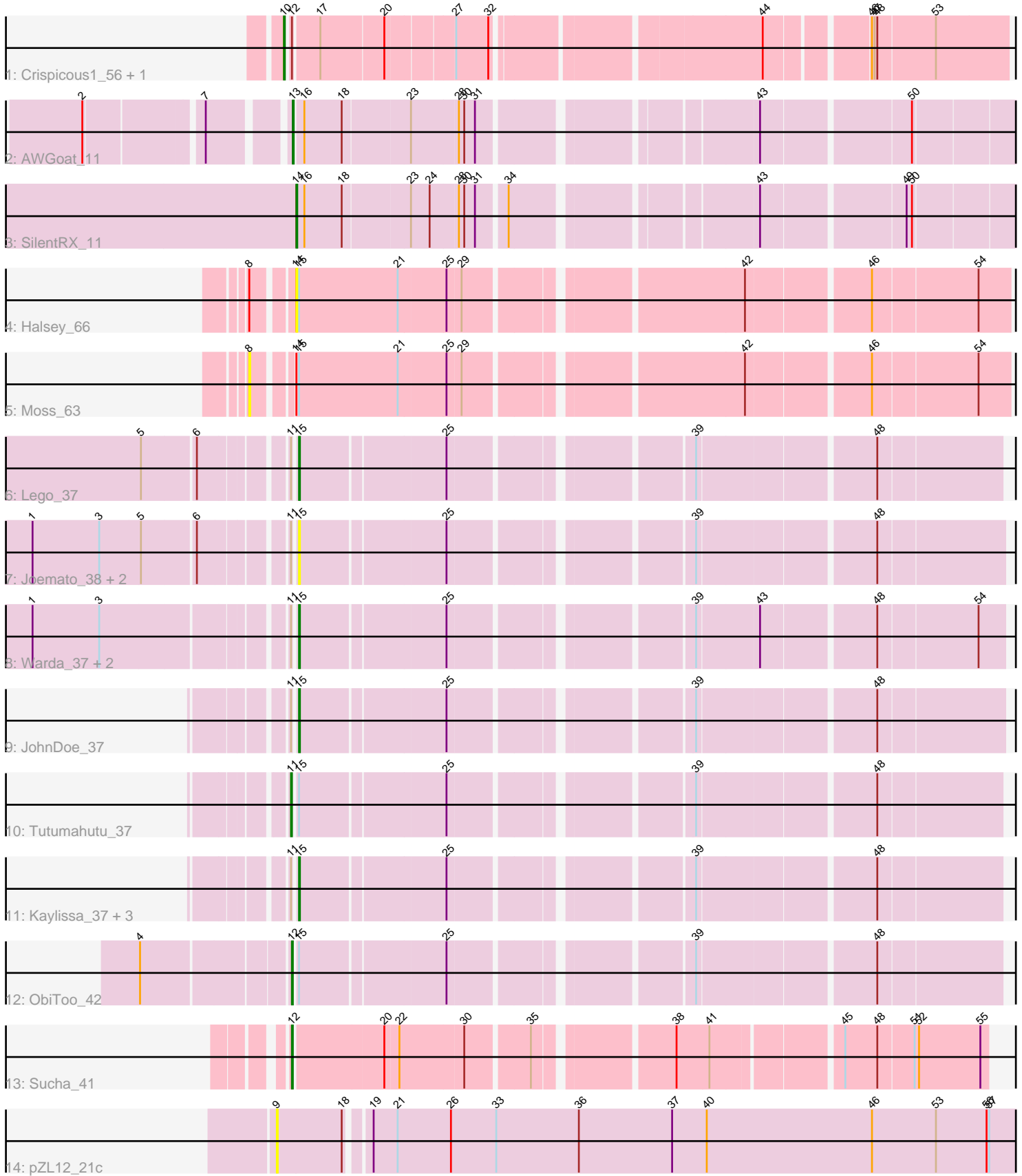


Pham 168507



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 168507 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 168507 has 22 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Crispicous1\_56, CactusRose\_57
- Track 2 : AWGoat\_11
- Track 3 : SilentRX\_11
- Track 4 : Halsey\_66
- Track 5 : Moss\_63
- Track 6 : Lego\_37
- Track 7 : Joemato\_38, Simpson\_39, Cyan\_36
- Track 8 : Warda\_37, Mudpuppy\_36, Tbone\_36
- Track 9 : JohnDoe\_37
- Track 10 : Tutumahutu\_37
- Track 11 : Kaylissa\_37, AGrandiflora\_37, YesChef\_37, Powerpuff\_39
- Track 12 : ObiToo\_42
- Track 13 : Sucha\_41
- Track 14 : pZL12\_21c

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

The start number called the most often in the published annotations is 15, it was called in 7 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AGrandiflora\_37, Cyan\_36, Joemato\_38, JohnDoe\_37, Kaylissa\_37, Lego\_37, Mudpuppy\_36, Powerpuff\_39, Simpson\_39, Tbone\_36, Warda\_37, YesChef\_37,

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

- Halsey\_66, Moss\_63, ObiToo\_42, Tutumahutu\_37,

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

- AWGoat\_11, CactusRose\_57, Crispicous1\_56, SilentRX\_11, Sucha\_41, pZL12\_21c,

## Summary by start number:

### Start 8:

- Found in 2 of 22 ( 9.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Moss\_63 (AZ),

### Start 9:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: pZL12\_21c (singleton),

### Start 10:

- Found in 2 of 22 ( 9.1% ) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CactusRose\_57 (A1), Crispicious1\_56 (A1),

### Start 11:

- Found in 13 of 22 ( 59.1% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Tutumahutu\_37 (AZ1),

### Start 12:

- Found in 4 of 22 ( 18.2% ) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ObiToo\_42 (AZ1), Sucha\_41 (EJ),

### Start 13:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat\_11 (AP4),

### Start 14:

- Found in 3 of 22 ( 13.6% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Halsey\_66 (AZ), SilentRX\_11 (AP4),

### Start 15:

- Found in 16 of 22 ( 72.7% ) of genes in pham
- Manual Annotations of this start: 7 of 14
- Called 75.0% of time when present
- Phage (with cluster) where this start called: AGrandiflora\_37 (AZ1), Cyan\_36 (AZ1), Joemato\_38 (AZ1), JohnDoe\_37 (AZ1), Kaylissa\_37 (AZ1), Lego\_37 (AZ1), Mudpuppy\_36 (AZ1), Powerpuff\_39 (AZ1), Simpson\_39 (AZ1), Tbone\_36 (AZ1),

Warda\_37 (AZ1), YesChef\_37 (AZ1),

### **Summary by clusters:**

There are 6 clusters represented in this pham: singleton, EJ, AP4, A1, AZ1, AZ,

Info for manual annotations of cluster A1:

- Start number 10 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster AP4:

- Start number 13 was manually annotated 1 time for cluster AP4.
- Start number 14 was manually annotated 1 time for cluster AP4.

Info for manual annotations of cluster AZ1:

- Start number 11 was manually annotated 1 time for cluster AZ1.
- Start number 12 was manually annotated 1 time for cluster AZ1.
- Start number 15 was manually annotated 7 times for cluster AZ1.

Info for manual annotations of cluster EJ:

- Start number 12 was manually annotated 1 time for cluster EJ.

### **Gene Information:**

Gene: AGrandiflora\_37 Start: 25933, Stop: 26643, Start Num: 15

Candidate Starts for AGrandiflora\_37:

(Start: 11 @25930 has 1 MA's), (Start: 15 @25933 has 7 MA's), (25, 26086), (39, 26323), (48, 26509),

Gene: AWGoat\_11 Start: 4286, Stop: 5023, Start Num: 13

Candidate Starts for AWGoat\_11:

(2, 4094), (7, 4214), (Start: 13 @4286 has 1 MA's), (16, 4295), (18, 4337), (23, 4409), (28, 4460), (30, 4466), (31, 4478), (43, 4751), (50, 4907),

Gene: CactusRose\_57 Start: 40088, Stop: 39360, Start Num: 10

Candidate Starts for CactusRose\_57:

(Start: 10 @40088 has 2 MA's), (Start: 12 @40085 has 2 MA's), (17, 40058), (20, 39989), (27, 39920), (32, 39884), (44, 39611), (46, 39509), (47, 39506), (48, 39503), (53, 39440),

Gene: Crispicous1\_56 Start: 39141, Stop: 38413, Start Num: 10

Candidate Starts for Crispicous1\_56:

(Start: 10 @39141 has 2 MA's), (Start: 12 @39138 has 2 MA's), (17, 39111), (20, 39042), (27, 38973), (32, 38937), (44, 38664), (46, 38562), (47, 38559), (48, 38556), (53, 38493),

Gene: Cyan\_36 Start: 25989, Stop: 26702, Start Num: 15

Candidate Starts for Cyan\_36:

(1, 25725), (3, 25800), (5, 25845), (6, 25902), (Start: 11 @25986 has 1 MA's), (Start: 15 @25989 has 7 MA's), (25, 26142), (39, 26379), (48, 26565),

Gene: Halsey\_66 Start: 35942, Stop: 36682, Start Num: 14

Candidate Starts for Halsey\_66:

(8, 35906), (Start: 14 @35942 has 1 MA's), (Start: 15 @35945 has 7 MA's), (21, 36056), (25, 36107), (29, 36122), (42, 36404), (46, 36533), (54, 36647),

Gene: Joemato\_38 Start: 26020, Stop: 26733, Start Num: 15

Candidate Starts for Joemato\_38:

(1, 25756), (3, 25831), (5, 25876), (6, 25933), (Start: 11 @26017 has 1 MA's), (Start: 15 @26020 has 7 MA's), (25, 26173), (39, 26410), (48, 26596),

Gene: JohnDoe\_37 Start: 26012, Stop: 26725, Start Num: 15

Candidate Starts for JohnDoe\_37:

(Start: 11 @26009 has 1 MA's), (Start: 15 @26012 has 7 MA's), (25, 26165), (39, 26402), (48, 26588),

Gene: Kaylissa\_37 Start: 25954, Stop: 26664, Start Num: 15

Candidate Starts for Kaylissa\_37:

(Start: 11 @25951 has 1 MA's), (Start: 15 @25954 has 7 MA's), (25, 26107), (39, 26344), (48, 26530),

Gene: Lego\_37 Start: 25900, Stop: 26610, Start Num: 15

Candidate Starts for Lego\_37:

(5, 25759), (6, 25816), (Start: 11 @25897 has 1 MA's), (Start: 15 @25900 has 7 MA's), (25, 26053), (39, 26290), (48, 26476),

Gene: Moss\_63 Start: 35847, Stop: 36623, Start Num: 8

Candidate Starts for Moss\_63:

(8, 35847), (Start: 14 @35883 has 1 MA's), (Start: 15 @35886 has 7 MA's), (21, 35997), (25, 36048), (29, 36063), (42, 36345), (46, 36474), (54, 36588),

Gene: Mudpuppy\_36 Start: 25767, Stop: 26480, Start Num: 15

Candidate Starts for Mudpuppy\_36:

(1, 25503), (3, 25578), (Start: 11 @25764 has 1 MA's), (Start: 15 @25767 has 7 MA's), (25, 25920), (39, 26157), (43, 26223), (48, 26343), (54, 26451),

Gene: ObiToo\_42 Start: 26828, Stop: 27541, Start Num: 12

Candidate Starts for ObiToo\_42:

(4, 26675), (Start: 12 @26828 has 2 MA's), (Start: 15 @26831 has 7 MA's), (25, 26984), (39, 27221), (48, 27407),

Gene: Powerpuff\_39 Start: 27103, Stop: 27813, Start Num: 15

Candidate Starts for Powerpuff\_39:

(Start: 11 @27100 has 1 MA's), (Start: 15 @27103 has 7 MA's), (25, 27256), (39, 27493), (48, 27679),

Gene: SilentRX\_11 Start: 3891, Stop: 4628, Start Num: 14

Candidate Starts for SilentRX\_11:

(Start: 14 @3891 has 1 MA's), (16, 3900), (18, 3942), (23, 4014), (24, 4035), (28, 4065), (30, 4071), (31, 4083), (34, 4113), (43, 4356), (49, 4506), (50, 4512),

Gene: Simpson\_39 Start: 26020, Stop: 26733, Start Num: 15

Candidate Starts for Simpson\_39:

(1, 25756), (3, 25831), (5, 25876), (6, 25933), (Start: 11 @26017 has 1 MA's), (Start: 15 @26020 has 7 MA's), (25, 26173), (39, 26410), (48, 26596),

Gene: Sucha\_41 Start: 26232, Stop: 26936, Start Num: 12

Candidate Starts for Sucha\_41:

(Start: 12 @26232 has 2 MA's), (20, 26328), (22, 26343), (30, 26412), (35, 26478), (38, 26613), (41, 26649), (45, 26781), (48, 26817), (51, 26856), (52, 26859), (55, 26928),

Gene: Tbone\_36 Start: 25815, Stop: 26528, Start Num: 15

Candidate Starts for Tbone\_36:

(1, 25551), (3, 25626), (Start: 11 @25812 has 1 MA's), (Start: 15 @25815 has 7 MA's), (25, 25968), (39, 26205), (43, 26271), (48, 26391), (54, 26499),

Gene: Tutumahutu\_37 Start: 25982, Stop: 26695, Start Num: 11

Candidate Starts for Tutumahutu\_37:

(Start: 11 @25982 has 1 MA's), (Start: 15 @25985 has 7 MA's), (25, 26138), (39, 26375), (48, 26561),

Gene: Warda\_37 Start: 25991, Stop: 26704, Start Num: 15

Candidate Starts for Warda\_37:

(1, 25727), (3, 25802), (Start: 11 @25988 has 1 MA's), (Start: 15 @25991 has 7 MA's), (25, 26144), (39, 26381), (43, 26447), (48, 26567), (54, 26675),

Gene: YesChef\_37 Start: 25962, Stop: 26672, Start Num: 15

Candidate Starts for YesChef\_37:

(Start: 11 @25959 has 1 MA's), (Start: 15 @25962 has 7 MA's), (25, 26115), (39, 26352), (48, 26538),

Gene: pZL12\_21c Start: 14130, Stop: 13288, Start Num: 9

Candidate Starts for pZL12\_21c:

(9, 14130), (18, 14058), (19, 14037), (21, 14010), (26, 13950), (33, 13899), (36, 13806), (37, 13701), (40, 13662), (46, 13476), (53, 13404), (56, 13347), (57, 13344),