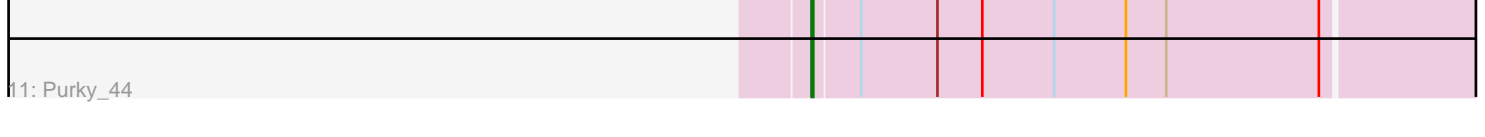
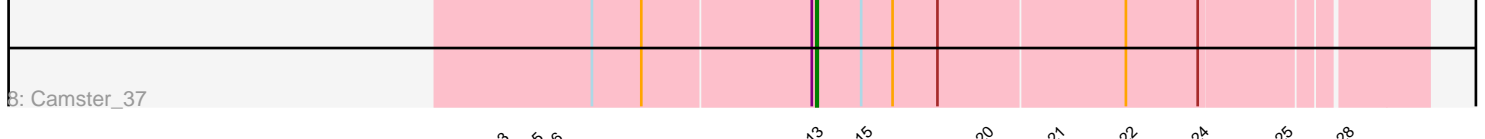
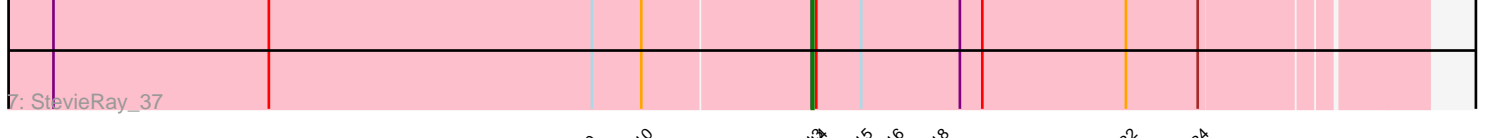
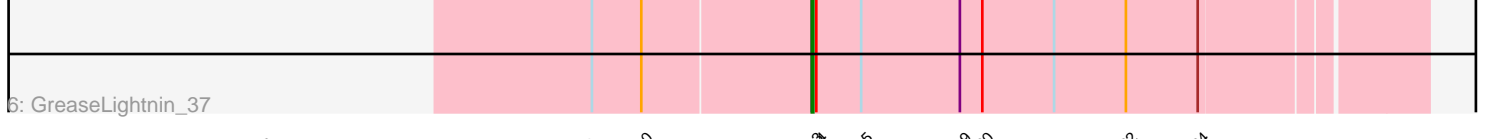
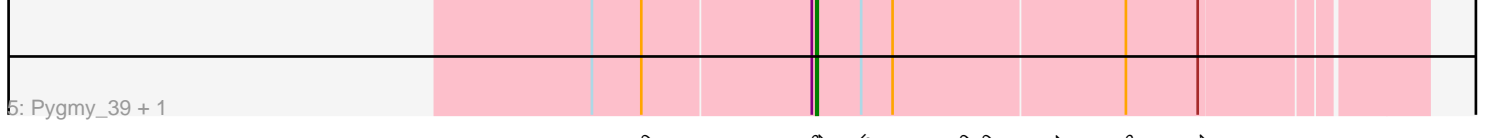
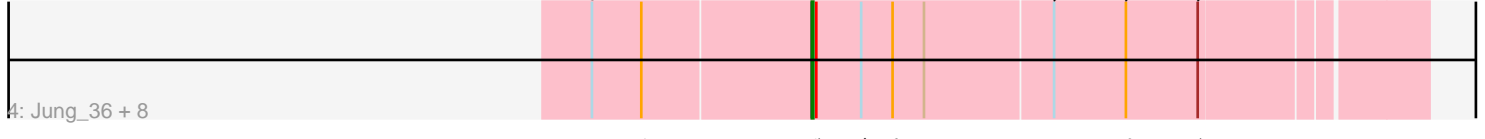
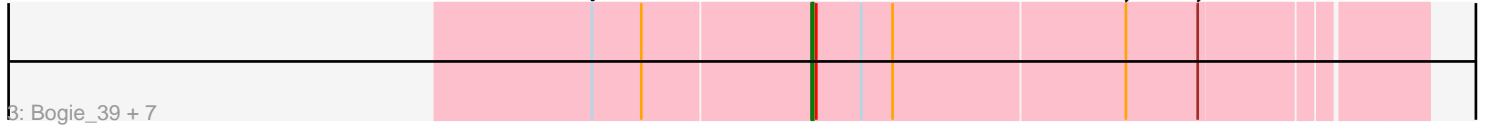
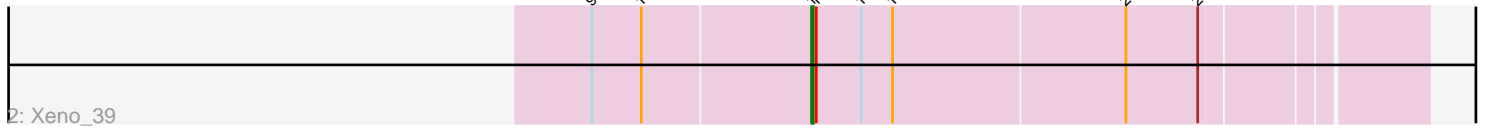
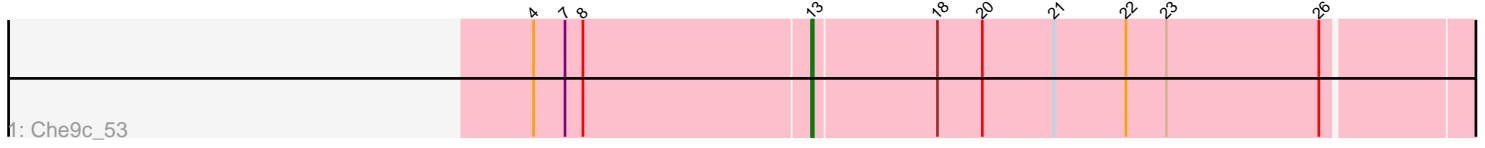


# Pham 170238



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 170238 Report

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

Pham number 170238 has 27 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Che9c\_53
- Track 2 : Xeno\_39
- Track 3 : Bogie\_39, Brusacoram\_37, Bunnies\_37, Ksquared\_37, Malithi\_37, Thespis\_37, Atcoo\_37, Shipwreck\_39
- Track 4 : Jung\_36, KilKor\_37, Polkaroo\_37, Phalm\_37, Megiddo\_37, Glaske\_37, Willsammy\_36, StressBall\_37, CactusJack\_37
- Track 5 : Pygmy\_39, Juniormint\_37
- Track 6 : GreaseLightnin\_37
- Track 7 : StevieRay\_37
- Track 8 : Camster\_37
- Track 9 : BigNuz\_40
- Track 10 : ThulaThula\_43
- Track 11 : Purky\_44

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

The start number called the most often in the published annotations is 13, it was called in 23 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Atcoo\_37, BigNuz\_40, Bogie\_39, Brusacoram\_37, Bunnies\_37, CactusJack\_37, Che9c\_53, Glaske\_37, GreaseLightnin\_37, Jung\_36, KilKor\_37, Ksquared\_37, Malithi\_37, Megiddo\_37, Phalm\_37, Polkaroo\_37, Purky\_44, Shipwreck\_39, StevieRay\_37, StressBall\_37, Thespis\_37, ThulaThula\_43, Willsammy\_36, Xeno\_39,

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

- Camster\_37, Juniormint\_37, Pygmy\_39,

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

- 

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

Start 13:

- Found in 27 of 27 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 23 of 26
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Atcoo\_37 (P1), BigNuz\_40 (P4), Bogie\_39 (P1), Brusacoram\_37 (P1), Bunnies\_37 (P1), CactusJack\_37 (P1), Che9c\_53 (I2), Glaske\_37 (P1), GreaseLightnin\_37 (P1), Jung\_36 (P1), KilKor\_37 (P1), Ksquared\_37 (P1), Malithi\_37 (P1), Megiddo\_37 (P1), Phalm\_37 (P1), Polkaroo\_37 (P1), Purky\_44 (P6), Shipwreck\_39 (P1), StevieRay\_37 (P1), StressBall\_37 (P1), Thespis\_37 (P1), ThulaThula\_43 (P5), Willsammy\_36 (P1), Xeno\_39 (N),

Start 14:

- Found in 23 of 27 ( 85.2% ) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 13.0% of time when present
- Phage (with cluster) where this start called: Camster\_37 (P1), Juniormint\_37 (P1), Pygmy\_39 (P1),

### **Summary by clusters:**

There are 6 clusters represented in this pham: P1, P6, P4, P5, I2, N,

Info for manual annotations of cluster I2:

- Start number 13 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster N:

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

Info for manual annotations of cluster P1:

- Start number 13 was manually annotated 18 times for cluster P1.
- Start number 14 was manually annotated 3 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 13 was manually annotated 1 time for cluster P4.

Info for manual annotations of cluster P5:

- Start number 13 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:

- Start number 13 was manually annotated 1 time for cluster P6.

### **Gene Information:**

Gene: Atcoo\_37 Start: 29830, Stop: 30222, Start Num: 13

Candidate Starts for Atcoo\_37:

(9, 29686), (10, 29719), (Start: 13 @29830 has 23 MA's), (Start: 14 @29833 has 3 MA's), (15, 29863), (16, 29884), (22, 30037), (24, 30085),

Gene: BigNuz\_40 Start: 31449, Stop: 31847, Start Num: 13

Candidate Starts for BigNuz\_40:

(3, 31257), (5, 31278), (6, 31290), (Start: 13 @31449 has 23 MA's), (15, 31479), (20, 31560), (21, 31608), (22, 31656), (24, 31704), (25, 31755), (28, 31791),

Gene: Bogie\_39 Start: 31126, Stop: 31521, Start Num: 13

Candidate Starts for Bogie\_39:

(9, 30982), (10, 31015), (Start: 13 @31126 has 23 MA's), (Start: 14 @31129 has 3 MA's), (15, 31159), (16, 31180), (22, 31333), (24, 31381),

Gene: Brusacoram\_37 Start: 29336, Stop: 29728, Start Num: 13

Candidate Starts for Brusacoram\_37:

(9, 29192), (10, 29225), (Start: 13 @29336 has 23 MA's), (Start: 14 @29339 has 3 MA's), (15, 29369), (16, 29390), (22, 29543), (24, 29591),

Gene: Bunnies\_37 Start: 29357, Stop: 29752, Start Num: 13

Candidate Starts for Bunnies\_37:

(9, 29213), (10, 29246), (Start: 13 @29357 has 23 MA's), (Start: 14 @29360 has 3 MA's), (15, 29390), (16, 29411), (22, 29564), (24, 29612),

Gene: CactusJack\_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for CactusJack\_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 23 MA's), (Start: 14 @29600 has 3 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (24, 29852),

Gene: Camster\_37 Start: 29376, Stop: 29768, Start Num: 14

Candidate Starts for Camster\_37:

(9, 29229), (10, 29262), (Start: 13 @29373 has 23 MA's), (Start: 14 @29376 has 3 MA's), (15, 29406), (16, 29427), (18, 29457), (22, 29580), (24, 29628),

Gene: Che9c\_53 Start: 40661, Stop: 41131, Start Num: 13

Candidate Starts for Che9c\_53:

(4, 40478), (7, 40499), (8, 40511), (Start: 13 @40661 has 23 MA's), (18, 40742), (20, 40772), (21, 40820), (22, 40868), (23, 40895), (26, 40997),

Gene: Glaske\_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for Glaske\_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 23 MA's), (Start: 14 @29600 has 3 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (24, 29852),

Gene: GreaseLightnin\_37 Start: 29583, Stop: 29981, Start Num: 13

Candidate Starts for GreaseLightnin\_37:

(9, 29439), (10, 29472), (Start: 13 @29583 has 23 MA's), (Start: 14 @29586 has 3 MA's), (15, 29616), (19, 29682), (20, 29697), (21, 29745), (22, 29793), (24, 29841),

Gene: Jung\_36 Start: 29304, Stop: 29699, Start Num: 13

Candidate Starts for Jung\_36:

(9, 29160), (10, 29193), (Start: 13 @29304 has 23 MA's), (Start: 14 @29307 has 3 MA's), (15, 29337), (16, 29358), (17, 29379), (21, 29463), (22, 29511), (24, 29559),

Gene: Juniormint\_37 Start: 29382, Stop: 29774, Start Num: 14

Candidate Starts for Juniormint\_37:

(9, 29235), (10, 29268), (Start: 13 @29379 has 23 MA's), (Start: 14 @29382 has 3 MA's), (15, 29412), (16, 29433), (22, 29586), (24, 29634),

Gene: KilKor\_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for KilKor\_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 23 MA's), (Start: 14 @29600 has 3 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (24, 29852),

Gene: Ksquared\_37 Start: 29357, Stop: 29752, Start Num: 13

Candidate Starts for Ksquared\_37:

(9, 29213), (10, 29246), (Start: 13 @29357 has 23 MA's), (Start: 14 @29360 has 3 MA's), (15, 29390), (16, 29411), (22, 29564), (24, 29612),

Gene: Malithi\_37 Start: 29266, Stop: 29661, Start Num: 13

Candidate Starts for Malithi\_37:

(9, 29122), (10, 29155), (Start: 13 @29266 has 23 MA's), (Start: 14 @29269 has 3 MA's), (15, 29299), (16, 29320), (22, 29473), (24, 29521),

Gene: Megiddo\_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for Megiddo\_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 23 MA's), (Start: 14 @29600 has 3 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (24, 29852),

Gene: Phalm\_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for Phalm\_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 23 MA's), (Start: 14 @29600 has 3 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (24, 29852),

Gene: Polkaroo\_37 Start: 29354, Stop: 29749, Start Num: 13

Candidate Starts for Polkaroo\_37:

(9, 29210), (10, 29243), (Start: 13 @29354 has 23 MA's), (Start: 14 @29357 has 3 MA's), (15, 29387), (16, 29408), (17, 29429), (21, 29513), (22, 29561), (24, 29609),

Gene: Purky\_44 Start: 32059, Stop: 32535, Start Num: 13

Candidate Starts for Purky\_44:

(Start: 13 @32059 has 23 MA's), (15, 32089), (18, 32140), (20, 32170), (21, 32218), (22, 32266), (23, 32293), (26, 32395),

Gene: Pygmy\_39 Start: 31185, Stop: 31577, Start Num: 14

Candidate Starts for Pygmy\_39:

(9, 31038), (10, 31071), (Start: 13 @31182 has 23 MA's), (Start: 14 @31185 has 3 MA's), (15, 31215), (16, 31236), (22, 31389), (24, 31437),

Gene: Shipwreck\_39 Start: 31157, Stop: 31552, Start Num: 13

Candidate Starts for Shipwreck\_39:

(9, 31013), (10, 31046), (Start: 13 @31157 has 23 MA's), (Start: 14 @31160 has 3 MA's), (15, 31190), (16, 31211), (22, 31364), (24, 31412),

Gene: StevieRay\_37 Start: 29296, Stop: 29694, Start Num: 13

Candidate Starts for StevieRay\_37:

(1, 28792), (2, 28936), (9, 29152), (10, 29185), (Start: 13 @29296 has 23 MA's), (Start: 14 @29299 has 3 MA's), (15, 29329), (19, 29395), (20, 29410), (22, 29506), (24, 29554),

Gene: StressBall\_37 Start: 29597, Stop: 29992, Start Num: 13

Candidate Starts for StressBall\_37:

(9, 29453), (10, 29486), (Start: 13 @29597 has 23 MA's), (Start: 14 @29600 has 3 MA's), (15, 29630), (16, 29651), (17, 29672), (21, 29756), (22, 29804), (24, 29852),

Gene: Thespis\_37 Start: 29336, Stop: 29728, Start Num: 13

Candidate Starts for Thespis\_37:

(9, 29192), (10, 29225), (Start: 13 @29336 has 23 MA's), (Start: 14 @29339 has 3 MA's), (15, 29369), (16, 29390), (22, 29543), (24, 29591),

Gene: ThulaThula\_43 Start: 33482, Stop: 33961, Start Num: 13

Candidate Starts for ThulaThula\_43:

(11, 33407), (12, 33479), (Start: 13 @33482 has 23 MA's), (19, 33578), (20, 33593), (21, 33641), (22, 33689), (23, 33716), (26, 33818), (27, 33824), (29, 33890),

Gene: Willsammy\_36 Start: 29080, Stop: 29475, Start Num: 13

Candidate Starts for Willsammy\_36:

(9, 28936), (10, 28969), (Start: 13 @29080 has 23 MA's), (Start: 14 @29083 has 3 MA's), (15, 29113), (16, 29134), (17, 29155), (21, 29239), (22, 29287), (24, 29335),

Gene: Xeno\_39 Start: 28678, Stop: 29070, Start Num: 13

Candidate Starts for Xeno\_39:

(9, 28534), (10, 28567), (Start: 13 @28678 has 23 MA's), (Start: 14 @28681 has 3 MA's), (15, 28711), (16, 28732), (22, 28885), (24, 28933),