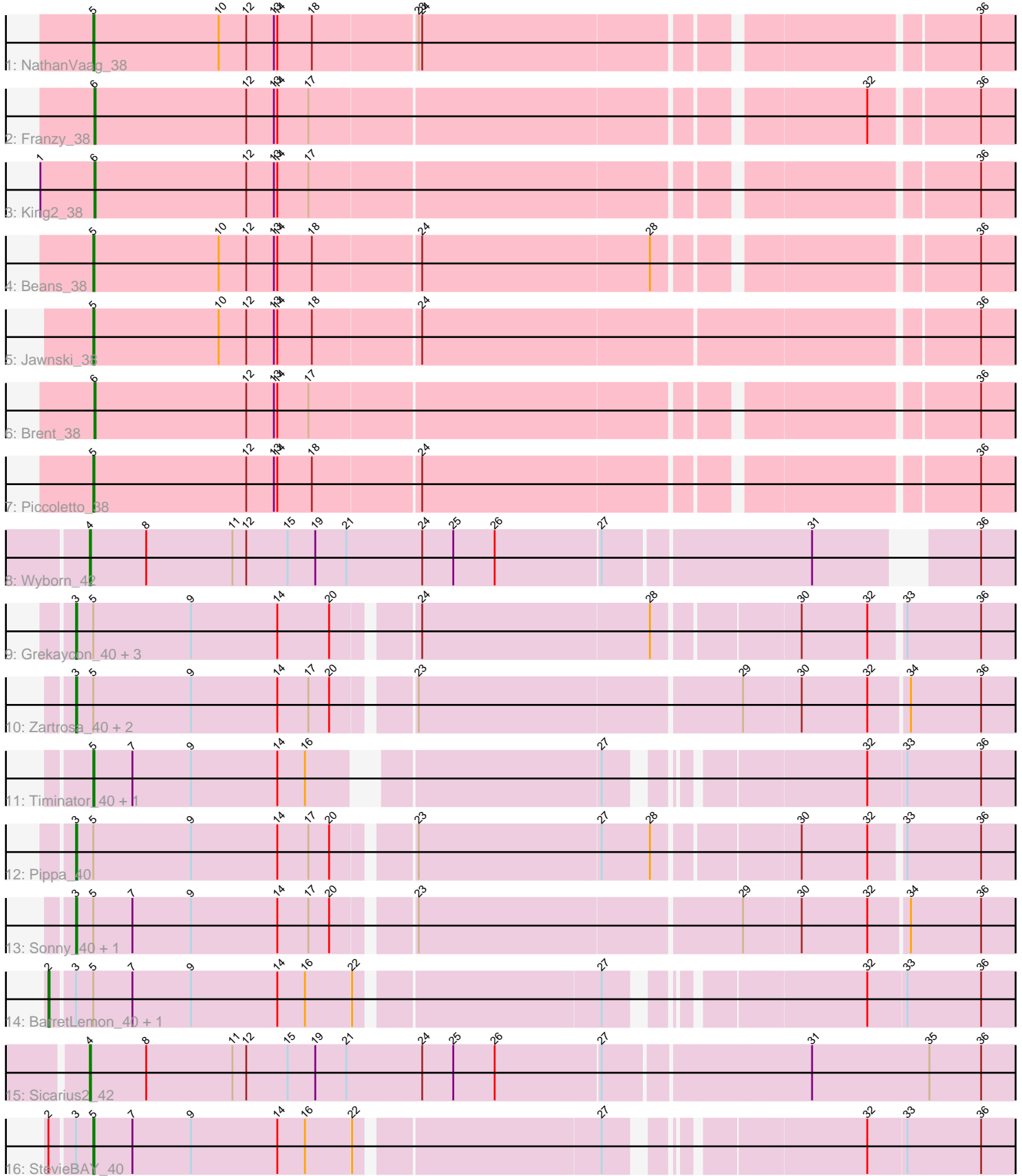


Pham 160702



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 160702 Report

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

Pham number 160702 has 24 members, 1 are drafts.

Phages represented in each track:

- Track 1 : NathanVaag\_38
- Track 2 : Franzy\_38
- Track 3 : King2\_38
- Track 4 : Beans\_38
- Track 5 : Jawnski\_38
- Track 6 : Brent\_38
- Track 7 : Piccoletto\_38
- Track 8 : Wyborn\_42
- Track 9 : Grekaycon\_40, Martha\_40, BossLady\_40, TaeYoung\_40
- Track 10 : Zartrosa\_40, Shade\_40, JKerns\_40
- Track 11 : Timinator\_40, LeeroyJ\_40
- Track 12 : Pippa\_40
- Track 13 : Sonny\_40, Jordan\_40
- Track 14 : BarretLemon\_40, GravityBall\_40
- Track 15 : Sicarius2\_42
- Track 16 : StevieBAY\_40

### ***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 10 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BossLady\_40, Grekaycon\_40, JKerns\_40, Jordan\_40, Martha\_40, Pippa\_40, Shade\_40, Sonny\_40, TaeYoung\_40, Zartrosa\_40,

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

- BarretLemon\_40, GravityBall\_40, StevieBAY\_40,

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

- Beans\_38, Brent\_38, Franzy\_38, Jawnski\_38, King2\_38, LeeroyJ\_40, NathanVaag\_38, Piccoletto\_38, Sicarius2\_42, Timinator\_40, Wyborn\_42,

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

Start 2:

- Found in 3 of 24 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 66.7% of time when present
- Phage (with cluster) where this start called: BarretLemon\_40 (AO2), GravityBall\_40 (AO2),

Start 3:

- Found in 13 of 24 ( 54.2% ) of genes in pham
- Manual Annotations of this start: 10 of 23
- Called 76.9% of time when present
- Phage (with cluster) where this start called: BossLady\_40 (AO2), Grekaycon\_40 (AO2), JKerns\_40 (AO2), Jordan\_40 (AO2), Martha\_40 (AO2), Pippa\_40 (AO2), Shade\_40 (AO2), Sonny\_40 (AO2), TaeYoung\_40 (AO2), Zartrosa\_40 (AO2),

Start 4:

- Found in 2 of 24 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sicarius2\_42 (AO2), Wyborn\_42 (AO2),

Start 5:

- Found in 19 of 24 ( 79.2% ) of genes in pham
- Manual Annotations of this start: 7 of 23
- Called 36.8% of time when present
- Phage (with cluster) where this start called: Beans\_38 (AO1), Jawnski\_38 (AO1), LeeroyJ\_40 (AO2), NathanVaag\_38 (AO1), Piccoletto\_38 (AO1), StevieBAY\_40 (AO2), Timinator\_40 (AO2),

Start 6:

- Found in 3 of 24 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 3 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Brent\_38 (AO1), Franzy\_38 (AO1), King2\_38 (AO1),

**Summary by clusters:**

There are 2 clusters represented in this pham: AO2, AO1,

Info for manual annotations of cluster AO1:

- Start number 5 was manually annotated 4 times for cluster AO1.
- Start number 6 was manually annotated 3 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 2 was manually annotated 1 time for cluster AO2.
- Start number 3 was manually annotated 10 times for cluster AO2.
- Start number 4 was manually annotated 2 times for cluster AO2.
- Start number 5 was manually annotated 3 times for cluster AO2.

**Gene Information:**

Gene: BarretLemon\_40 Start: 32666, Stop: 33493, Start Num: 2

Candidate Starts for BarretLemon\_40:

(Start: 2 @32666 has 1 MA's), (Start: 3 @32684 has 10 MA's), (Start: 5 @32699 has 7 MA's), (7, 32732), (9, 32783), (14, 32858), (16, 32882), (22, 32921), (27, 33119), (32, 33305), (33, 33338), (36, 33401),

Gene: Beans\_38 Start: 32480, Stop: 33262, Start Num: 5

Candidate Starts for Beans\_38:

(Start: 5 @32480 has 7 MA's), (10, 32588), (12, 32612), (13, 32636), (14, 32639), (18, 32669), (24, 32759), (28, 32954), (36, 33203),

Gene: BossLady\_40 Start: 32670, Stop: 33500, Start Num: 3

Candidate Starts for BossLady\_40:

(Start: 3 @32670 has 10 MA's), (Start: 5 @32685 has 7 MA's), (9, 32769), (14, 32844), (20, 32889), (24, 32952), (28, 33147), (30, 33261), (32, 33318), (33, 33345), (36, 33408),

Gene: Brent\_38 Start: 32451, Stop: 33233, Start Num: 6

Candidate Starts for Brent\_38:

(Start: 6 @32451 has 3 MA's), (12, 32583), (13, 32607), (14, 32610), (17, 32637), (36, 33174),

Gene: Franzy\_38 Start: 32467, Stop: 33249, Start Num: 6

Candidate Starts for Franzy\_38:

(Start: 6 @32467 has 3 MA's), (12, 32599), (13, 32623), (14, 32626), (17, 32653), (32, 33103), (36, 33190),

Gene: GravityBall\_40 Start: 32696, Stop: 33523, Start Num: 2

Candidate Starts for GravityBall\_40:

(Start: 2 @32696 has 1 MA's), (Start: 3 @32714 has 10 MA's), (Start: 5 @32729 has 7 MA's), (7, 32762), (9, 32813), (14, 32888), (16, 32912), (22, 32951), (27, 33149), (32, 33335), (33, 33368), (36, 33431),

Gene: Grekaycon\_40 Start: 32616, Stop: 33446, Start Num: 3

Candidate Starts for Grekaycon\_40:

(Start: 3 @32616 has 10 MA's), (Start: 5 @32631 has 7 MA's), (9, 32715), (14, 32790), (20, 32835), (24, 32898), (28, 33093), (30, 33207), (32, 33264), (33, 33291), (36, 33354),

Gene: JKerns\_40 Start: 32677, Stop: 33519, Start Num: 3

Candidate Starts for JKerns\_40:

(Start: 3 @32677 has 10 MA's), (Start: 5 @32692 has 7 MA's), (9, 32776), (14, 32851), (17, 32878), (20, 32896), (23, 32956), (29, 33229), (30, 33277), (32, 33334), (34, 33367), (36, 33427),

Gene: Jawnski\_38 Start: 32439, Stop: 33239, Start Num: 5

Candidate Starts for Jawnski\_38:

(Start: 5 @32439 has 7 MA's), (10, 32547), (12, 32571), (13, 32595), (14, 32598), (18, 32628), (24, 32718), (36, 33180),

Gene: Jordan\_40 Start: 32714, Stop: 33556, Start Num: 3

Candidate Starts for Jordan\_40:

(Start: 3 @32714 has 10 MA's), (Start: 5 @32729 has 7 MA's), (7, 32762), (9, 32813), (14, 32888), (17, 32915), (20, 32933), (23, 32993), (29, 33266), (30, 33314), (32, 33371), (34, 33404), (36, 33464),

Gene: King2\_38 Start: 32445, Stop: 33227, Start Num: 6

Candidate Starts for King2\_38:

(1, 32400), (Start: 6 @32445 has 3 MA's), (12, 32577), (13, 32601), (14, 32604), (17, 32631), (36, 33168),

Gene: LeeroyJ\_40 Start: 32683, Stop: 33462, Start Num: 5

Candidate Starts for LeeroyJ\_40:

(Start: 5 @32683 has 7 MA's), (7, 32716), (9, 32767), (14, 32842), (16, 32866), (27, 33088), (32, 33274), (33, 33307), (36, 33370),

Gene: Martha\_40 Start: 32617, Stop: 33447, Start Num: 3

Candidate Starts for Martha\_40:

(Start: 3 @32617 has 10 MA's), (Start: 5 @32632 has 7 MA's), (9, 32716), (14, 32791), (20, 32836), (24, 32899), (28, 33094), (30, 33208), (32, 33265), (33, 33292), (36, 33355),

Gene: NathanVaag\_38 Start: 32456, Stop: 33238, Start Num: 5

Candidate Starts for NathanVaag\_38:

(Start: 5 @32456 has 7 MA's), (10, 32564), (12, 32588), (13, 32612), (14, 32615), (18, 32645), (23, 32732), (24, 32735), (36, 33179),

Gene: Piccoletto\_38 Start: 32454, Stop: 33236, Start Num: 5

Candidate Starts for Piccoletto\_38:

(Start: 5 @32454 has 7 MA's), (12, 32586), (13, 32610), (14, 32613), (18, 32643), (24, 32733), (36, 33177),

Gene: Pippa\_40 Start: 32772, Stop: 33602, Start Num: 3

Candidate Starts for Pippa\_40:

(Start: 3 @32772 has 10 MA's), (Start: 5 @32787 has 7 MA's), (9, 32871), (14, 32946), (17, 32973), (20, 32991), (23, 33051), (27, 33207), (28, 33249), (30, 33363), (32, 33420), (33, 33447), (36, 33510),

Gene: Shade\_40 Start: 32688, Stop: 33530, Start Num: 3

Candidate Starts for Shade\_40:

(Start: 3 @32688 has 10 MA's), (Start: 5 @32703 has 7 MA's), (9, 32787), (14, 32862), (17, 32889), (20, 32907), (23, 32967), (29, 33240), (30, 33288), (32, 33345), (34, 33378), (36, 33438),

Gene: Sicarius2\_42 Start: 32542, Stop: 33393, Start Num: 4

Candidate Starts for Sicarius2\_42:

(Start: 4 @32542 has 2 MA's), (8, 32590), (11, 32665), (12, 32677), (15, 32713), (19, 32737), (21, 32764), (24, 32830), (25, 32857), (26, 32893), (27, 32983), (31, 33154), (35, 33256), (36, 33301),

Gene: Sonny\_40 Start: 32723, Stop: 33565, Start Num: 3

Candidate Starts for Sonny\_40:

(Start: 3 @32723 has 10 MA's), (Start: 5 @32738 has 7 MA's), (7, 32771), (9, 32822), (14, 32897), (17, 32924), (20, 32942), (23, 33002), (29, 33275), (30, 33323), (32, 33380), (34, 33413), (36, 33473),

Gene: StevieBAY\_40 Start: 32729, Stop: 33523, Start Num: 5

Candidate Starts for StevieBAY\_40:

(Start: 2 @32696 has 1 MA's), (Start: 3 @32714 has 10 MA's), (Start: 5 @32729 has 7 MA's), (7, 32762), (9, 32813), (14, 32888), (16, 32912), (22, 32951), (27, 33149), (32, 33335), (33, 33368), (36, 33431),

Gene: TaeYoung\_40 Start: 32617, Stop: 33447, Start Num: 3

Candidate Starts for TaeYoung\_40:

(Start: 3 @32617 has 10 MA's), (Start: 5 @32632 has 7 MA's), (9, 32716), (14, 32791), (20, 32836), (24, 32899), (28, 33094), (30, 33208), (32, 33265), (33, 33292), (36, 33355),

Gene: Timinator\_40 Start: 32683, Stop: 33462, Start Num: 5

Candidate Starts for Timinator\_40:

(Start: 5 @32683 has 7 MA's), (7, 32716), (9, 32767), (14, 32842), (16, 32866), (27, 33088), (32, 33274), (33, 33307), (36, 33370),

Gene: Wyborn\_42 Start: 33130, Stop: 33945, Start Num: 4

Candidate Starts for Wyborn\_42:

(Start: 4 @33130 has 2 MA's), (8, 33178), (11, 33253), (12, 33265), (15, 33301), (19, 33325), (21, 33352), (24, 33418), (25, 33445), (26, 33481), (27, 33571), (31, 33742), (36, 33853),

Gene: Zartrosa\_40 Start: 32630, Stop: 33472, Start Num: 3

Candidate Starts for Zartrosa\_40:

(Start: 3 @32630 has 10 MA's), (Start: 5 @32645 has 7 MA's), (9, 32729), (14, 32804), (17, 32831), (20, 32849), (23, 32909), (29, 33182), (30, 33230), (32, 33287), (34, 33320), (36, 33380),