



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 203201 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203201 has 29 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Beans\_42
- Track 2 : Piccoletto\_42
- Track 3 : Franzy\_42, Brent\_42
- Track 4 : NathanVaag\_42
- Track 5 : Martha\_44, Grekaycon\_44, TaeYoung\_44, Sonny\_44, Jordan\_44
- Track 6 : Zartrosa\_44
- Track 7 : Timinator\_44, LeeroyJ\_44
- Track 8 : Pippa\_46
- Track 9 : JKerns\_44
- Track 10 : GravityBall\_44, StevieBAY\_44
- Track 11 : Kabreeze\_62, HumptyDumpty\_62, Linus\_62
- Track 12 : Chocolat\_62, MoyaNatalis\_62, Colucci\_64, Chubster\_63, RosiePosie\_61, JayCookie\_63
- Track 13 : KBurrousTX\_62
- Track 14 : Bhageatrice\_50
- Track 15 : Circuit\_66

### ***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 13 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beans\_42, Brent\_42, Franzy\_42, Grekaycon\_44, JKerns\_44, Jordan\_44, Martha\_44, NathanVaag\_42, Piccoletto\_42, Pippa\_46, Sonny\_44, TaeYoung\_44, Zartrosa\_44,

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

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

- Bhageatrice\_50, Chocolat\_62, Chubster\_63, Circuit\_66, Colucci\_64, GravityBall\_44, HumptyDumpty\_62, JayCookie\_63, KBurrousTX\_62, Kabreeze\_62, LeeroyJ\_44, Linus\_62, MoyaNatalis\_62, RosiePosie\_61, StevieBAY\_44, Timinator\_44,

## Summary by start number:

### Start 13:

- Found in 13 of 29 ( 44.8% ) of genes in pham
- Manual Annotations of this start: 13 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beans\_42 (AO1), Brent\_42 (AO1), Franzy\_42 (AO1), Grekaycon\_44 (AO2), JKerns\_44 (AO2), Jordan\_44 (AO2), Martha\_44 (AO2), NathanVaag\_42 (AO1), Piccoletto\_42 (AO1), Pippa\_46 (AO2), Sonny\_44 (AO2), TaeYoung\_44 (AO2), Zartrosa\_44 (AO2),

### Start 14:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bhageatrice\_50 (AY),

### Start 17:

- Found in 10 of 29 ( 34.5% ) of genes in pham
- Manual Annotations of this start: 5 of 26
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Chocolat\_62 (AR), Chubster\_63 (AR), Colucci\_64 (AR), JayCookie\_63 (AR), MoyaNatalis\_62 (AR), RosiePosie\_61 (AR),

### Start 18:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Circuit\_66 (FH),

### Start 19:

- Found in 4 of 29 ( 13.8% ) of genes in pham
- Manual Annotations of this start: 4 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GravityBall\_44 (AO2), LeeroyJ\_44 (AO2), StevieBAY\_44 (AO2), Timinator\_44 (AO2),

### Start 20:

- Found in 10 of 29 ( 34.5% ) of genes in pham
- Manual Annotations of this start: 4 of 26
- Called 40.0% of time when present
- Phage (with cluster) where this start called: HumptyDumpty\_62 (AR), KBurrousTX\_62 (AR), Kabreeze\_62 (AR), Linus\_62 (AR),

## Summary by clusters:

There are 5 clusters represented in this pham: FH, AY, AR, AO2, AO1,

Info for manual annotations of cluster AO1:

- Start number 13 was manually annotated 5 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 13 was manually annotated 8 times for cluster AO2.
- Start number 19 was manually annotated 4 times for cluster AO2.

Info for manual annotations of cluster AR:

- Start number 17 was manually annotated 5 times for cluster AR.
- Start number 20 was manually annotated 4 times for cluster AR.

### **Gene Information:**

Gene: Beans\_42 Start: 34760, Stop: 34993, Start Num: 13

Candidate Starts for Beans\_42:

(4, 34589), (Start: 13 @34760 has 13 MA's), (21, 34823), (30, 34970),

Gene: Bhageatrice\_50 Start: 32024, Stop: 32257, Start Num: 14

Candidate Starts for Bhageatrice\_50:

(14, 32024), (15, 32045),

Gene: Brent\_42 Start: 34704, Stop: 34937, Start Num: 13

Candidate Starts for Brent\_42:

(Start: 13 @34704 has 13 MA's), (21, 34767), (30, 34914),

Gene: Chocolat\_62 Start: 44717, Stop: 44875, Start Num: 17

Candidate Starts for Chocolat\_62:

(Start: 17 @44717 has 5 MA's), (Start: 20 @44726 has 4 MA's), (23, 44777), (24, 44789), (25, 44798), (29, 44867),

Gene: Chubster\_63 Start: 44869, Stop: 45027, Start Num: 17

Candidate Starts for Chubster\_63:

(Start: 17 @44869 has 5 MA's), (Start: 20 @44878 has 4 MA's), (23, 44929), (24, 44941), (25, 44950), (29, 45019),

Gene: Circuit\_66 Start: 43968, Stop: 43759, Start Num: 18

Candidate Starts for Circuit\_66:

(3, 44205), (18, 43968), (22, 43914),

Gene: Colucci\_64 Start: 44773, Stop: 44931, Start Num: 17

Candidate Starts for Colucci\_64:

(Start: 17 @44773 has 5 MA's), (Start: 20 @44782 has 4 MA's), (23, 44833), (24, 44845), (25, 44854), (29, 44923),

Gene: Franzy\_42 Start: 34720, Stop: 34953, Start Num: 13

Candidate Starts for Franzy\_42:

(Start: 13 @34720 has 13 MA's), (21, 34783), (30, 34930),

Gene: GravityBall\_44 Start: 34997, Stop: 35182, Start Num: 19

Candidate Starts for GravityBall\_44:

(6, 34769), (Start: 19 @34997 has 4 MA's), (21, 35009), (30, 35159),

Gene: Grekaycon\_44 Start: 34909, Stop: 35142, Start Num: 13

Candidate Starts for Grekaycon\_44:  
(Start: 13 @34909 has 13 MA's), (21, 34972), (30, 35119),

Gene: HumptyDumpty\_62 Start: 44665, Stop: 44814, Start Num: 20  
Candidate Starts for HumptyDumpty\_62:  
(Start: 17 @44656 has 5 MA's), (Start: 20 @44665 has 4 MA's), (23, 44716), (24, 44728), (25, 44737),  
(29, 44806),

Gene: JKerns\_44 Start: 34994, Stop: 35236, Start Num: 13  
Candidate Starts for JKerns\_44:  
(1, 34610), (6, 34808), (11, 34874), (12, 34892), (Start: 13 @34994 has 13 MA's), (26, 35159), (27,  
35162), (30, 35213),

Gene: JayCookie\_63 Start: 45128, Stop: 45286, Start Num: 17  
Candidate Starts for JayCookie\_63:  
(Start: 17 @45128 has 5 MA's), (Start: 20 @45137 has 4 MA's), (23, 45188), (24, 45200), (25, 45209),  
(29, 45278),

Gene: Jordan\_44 Start: 34995, Stop: 35228, Start Num: 13  
Candidate Starts for Jordan\_44:  
(Start: 13 @34995 has 13 MA's), (21, 35058), (30, 35205),

Gene: KBurrousTX\_62 Start: 46014, Stop: 46151, Start Num: 20  
Candidate Starts for KBurrousTX\_62:  
(Start: 17 @46005 has 5 MA's), (Start: 20 @46014 has 4 MA's), (23, 46065), (25, 46086), (28, 46137),

Gene: Kabreeze\_62 Start: 44744, Stop: 44893, Start Num: 20  
Candidate Starts for Kabreeze\_62:  
(Start: 17 @44735 has 5 MA's), (Start: 20 @44744 has 4 MA's), (23, 44795), (24, 44807), (25, 44816),  
(29, 44885),

Gene: LeeroyJ\_44 Start: 34936, Stop: 35121, Start Num: 19  
Candidate Starts for LeeroyJ\_44:  
(6, 34708), (7, 34720), (Start: 19 @34936 has 4 MA's), (21, 34948), (30, 35098),

Gene: Linus\_62 Start: 44867, Stop: 45016, Start Num: 20  
Candidate Starts for Linus\_62:  
(Start: 17 @44858 has 5 MA's), (Start: 20 @44867 has 4 MA's), (23, 44918), (24, 44930), (25, 44939),  
(29, 45008),

Gene: Martha\_44 Start: 34886, Stop: 35119, Start Num: 13  
Candidate Starts for Martha\_44:  
(Start: 13 @34886 has 13 MA's), (21, 34949), (30, 35096),

Gene: MoyaNatalis\_62 Start: 44704, Stop: 44862, Start Num: 17  
Candidate Starts for MoyaNatalis\_62:  
(Start: 17 @44704 has 5 MA's), (Start: 20 @44713 has 4 MA's), (23, 44764), (24, 44776), (25, 44785),  
(29, 44854),

Gene: NathanVaag\_42 Start: 34655, Stop: 34888, Start Num: 13  
Candidate Starts for NathanVaag\_42:  
(5, 34481), (8, 34517), (9, 34520), (10, 34538), (Start: 13 @34655 has 13 MA's), (21, 34718), (30,  
34865),

Gene: Piccoletto\_42 Start: 34680, Stop: 34913, Start Num: 13

Candidate Starts for Piccoletto\_42:

(2, 34461), (5, 34506), (8, 34542), (9, 34545), (10, 34563), (Start: 13 @34680 has 13 MA's), (21, 34743), (30, 34890),

Gene: Pippa\_46 Start: 35371, Stop: 35607, Start Num: 13

Candidate Starts for Pippa\_46:

(Start: 13 @35371 has 13 MA's), (16, 35398), (27, 35533), (30, 35584),

Gene: RosiePosie\_61 Start: 44394, Stop: 44552, Start Num: 17

Candidate Starts for RosiePosie\_61:

(Start: 17 @44394 has 5 MA's), (Start: 20 @44403 has 4 MA's), (23, 44454), (24, 44466), (25, 44475), (29, 44544),

Gene: Sonny\_44 Start: 35004, Stop: 35237, Start Num: 13

Candidate Starts for Sonny\_44:

(Start: 13 @35004 has 13 MA's), (21, 35067), (30, 35214),

Gene: StevieBAY\_44 Start: 34997, Stop: 35182, Start Num: 19

Candidate Starts for StevieBAY\_44:

(6, 34769), (Start: 19 @34997 has 4 MA's), (21, 35009), (30, 35159),

Gene: TaeYoung\_44 Start: 34910, Stop: 35143, Start Num: 13

Candidate Starts for TaeYoung\_44:

(Start: 13 @34910 has 13 MA's), (21, 34973), (30, 35120),

Gene: Timinator\_44 Start: 34936, Stop: 35121, Start Num: 19

Candidate Starts for Timinator\_44:

(6, 34708), (7, 34720), (Start: 19 @34936 has 4 MA's), (21, 34948), (30, 35098),

Gene: Zartrosa\_44 Start: 34947, Stop: 35189, Start Num: 13

Candidate Starts for Zartrosa\_44:

(6, 34761), (11, 34827), (12, 34845), (Start: 13 @34947 has 13 MA's), (26, 35112), (27, 35115), (30, 35166),