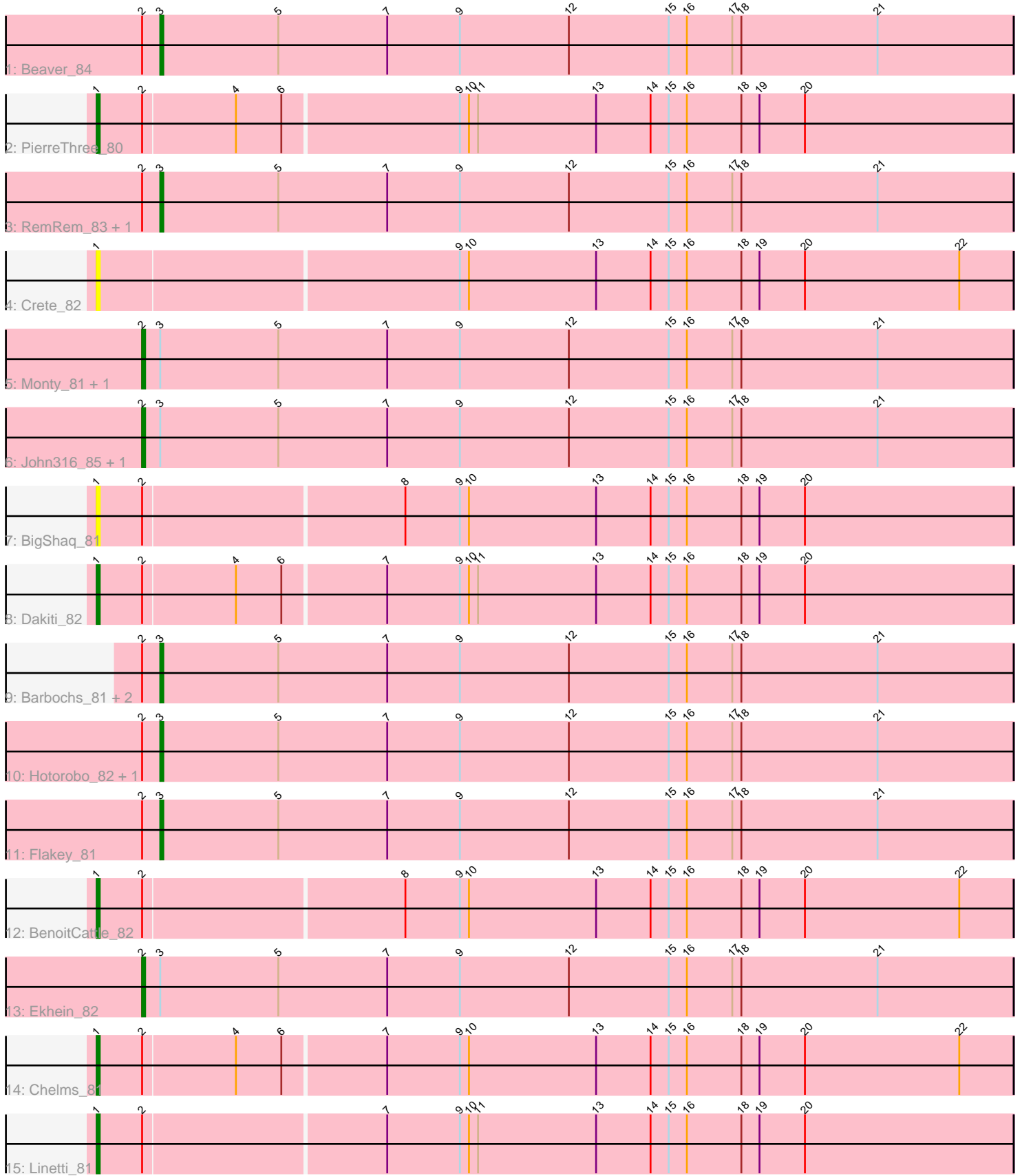


Pham 200581



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 200581 Report

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

Pham number 200581 has 21 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Beaver\_84
- Track 2 : PierreThree\_80
- Track 3 : RemRem\_83, Squibbles\_81
- Track 4 : Crete\_82
- Track 5 : Monty\_81, Breezic\_82
- Track 6 : John316\_85, GourdThymes\_82
- Track 7 : BigShaq\_81
- Track 8 : Dakiti\_82
- Track 9 : Barbochs\_81, CathyBurgh\_81, Lizzo\_82
- Track 10 : Hotorobo\_82, Gorko\_81
- Track 11 : Flakey\_81
- Track 12 : BenoitCattle\_82
- Track 13 : Ekhein\_82
- Track 14 : Chelms\_81
- Track 15 : Linetti\_81

### ***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 6 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Barbochs\_81, Beaver\_84, CathyBurgh\_81, Flakey\_81, Gorko\_81, Hotorobo\_82, Lizzo\_82, RemRem\_83, Squibbles\_81,

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

- Breezic\_82, Ekhein\_82, GourdThymes\_82, John316\_85, Monty\_81,

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

- BenoitCattle\_82, BigShaq\_81, Chelms\_81, Crete\_82, Dakiti\_82, Linetti\_81, PierreThree\_80,

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

#### Start 1:

- Found in 7 of 21 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 5 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BenoitCattle\_82 (CS2), BigShaq\_81 (CS2), Chelms\_81 (CS2), Crete\_82 (CS2), Dakiti\_82 (CS2), Linetti\_81 (CS2), PierreThree\_80 (CS2),

#### Start 2:

- Found in 20 of 21 ( 95.2% ) of genes in pham
- Manual Annotations of this start: 5 of 16
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Breezic\_82 (CS2), Ekhein\_82 (CS2), GourdThymes\_82 (CS2), John316\_85 (CS2), Monty\_81 (CS2),

#### Start 3:

- Found in 14 of 21 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 6 of 16
- Called 64.3% of time when present
- Phage (with cluster) where this start called: Barbochs\_81 (CS2), Beaver\_84 (CS2), CathyBurgh\_81 (CS2), Flakey\_81 (CS2), Gorko\_81 (CS2), Hotorobo\_82 (CS2), Lizzo\_82 (CS2), RemRem\_83 (CS2), Squibbles\_81 (CS2),

### Summary by clusters:

There is one cluster represented in this pham: CS2

#### Info for manual annotations of cluster CS2:

- Start number 1 was manually annotated 5 times for cluster CS2.
- Start number 2 was manually annotated 5 times for cluster CS2.
- Start number 3 was manually annotated 6 times for cluster CS2.

### **Gene Information:**

Gene: Barbochs\_81 Start: 61995, Stop: 61714, Start Num: 3

Candidate Starts for Barbochs\_81:

(Start: 2 @62001 has 5 MA's), (Start: 3 @61995 has 6 MA's), (5, 61956), (7, 61920), (9, 61896), (12, 61860), (15, 61827), (16, 61821), (17, 61806), (18, 61803), (21, 61758),

Gene: Beaver\_84 Start: 63743, Stop: 63462, Start Num: 3

Candidate Starts for Beaver\_84:

(Start: 2 @63749 has 5 MA's), (Start: 3 @63743 has 6 MA's), (5, 63704), (7, 63668), (9, 63644), (12, 63608), (15, 63575), (16, 63569), (17, 63554), (18, 63551), (21, 63506),

Gene: BenoitCattle\_82 Start: 62681, Stop: 62382, Start Num: 1

Candidate Starts for BenoitCattle\_82:

(Start: 1 @62681 has 5 MA's), (Start: 2 @62666 has 5 MA's), (8, 62582), (9, 62564), (10, 62561), (13, 62519), (14, 62501), (15, 62495), (16, 62489), (18, 62471), (19, 62465), (20, 62450), (22, 62399),

Gene: BigShaq\_81 Start: 62610, Stop: 62311, Start Num: 1

Candidate Starts for BigShaq\_81:

(Start: 1 @62610 has 5 MA's), (Start: 2 @62595 has 5 MA's), (8, 62511), (9, 62493), (10, 62490), (13, 62448), (14, 62430), (15, 62424), (16, 62418), (18, 62400), (19, 62394), (20, 62379),

Gene: Breezic\_82 Start: 62212, Stop: 61925, Start Num: 2

Candidate Starts for Breezic\_82:

(Start: 2 @62212 has 5 MA's), (Start: 3 @62206 has 6 MA's), (5, 62167), (7, 62131), (9, 62107), (12, 62071), (15, 62038), (16, 62032), (17, 62017), (18, 62014), (21, 61969),

Gene: CathyBurgh\_81 Start: 62726, Stop: 62445, Start Num: 3

Candidate Starts for CathyBurgh\_81:

(Start: 2 @62732 has 5 MA's), (Start: 3 @62726 has 6 MA's), (5, 62687), (7, 62651), (9, 62627), (12, 62591), (15, 62558), (16, 62552), (17, 62537), (18, 62534), (21, 62489),

Gene: Chelms\_81 Start: 62528, Stop: 62229, Start Num: 1

Candidate Starts for Chelms\_81:

(Start: 1 @62528 has 5 MA's), (Start: 2 @62513 has 5 MA's), (4, 62483), (6, 62468), (7, 62435), (9, 62411), (10, 62408), (13, 62366), (14, 62348), (15, 62342), (16, 62336), (18, 62318), (19, 62312), (20, 62297), (22, 62246),

Gene: Crete\_82 Start: 62923, Stop: 62624, Start Num: 1

Candidate Starts for Crete\_82:

(Start: 1 @62923 has 5 MA's), (9, 62806), (10, 62803), (13, 62761), (14, 62743), (15, 62737), (16, 62731), (18, 62713), (19, 62707), (20, 62692), (22, 62641),

Gene: Dakiti\_82 Start: 63326, Stop: 63027, Start Num: 1

Candidate Starts for Dakiti\_82:

(Start: 1 @63326 has 5 MA's), (Start: 2 @63311 has 5 MA's), (4, 63281), (6, 63266), (7, 63233), (9, 63209), (10, 63206), (11, 63203), (13, 63164), (14, 63146), (15, 63140), (16, 63134), (18, 63116), (19, 63110), (20, 63095),

Gene: Ekhein\_82 Start: 61902, Stop: 61615, Start Num: 2

Candidate Starts for Ekhein\_82:

(Start: 2 @61902 has 5 MA's), (Start: 3 @61896 has 6 MA's), (5, 61857), (7, 61821), (9, 61797), (12, 61761), (15, 61728), (16, 61722), (17, 61707), (18, 61704), (21, 61659),

Gene: Flakey\_81 Start: 62712, Stop: 62431, Start Num: 3

Candidate Starts for Flakey\_81:

(Start: 2 @62718 has 5 MA's), (Start: 3 @62712 has 6 MA's), (5, 62673), (7, 62637), (9, 62613), (12, 62577), (15, 62544), (16, 62538), (17, 62523), (18, 62520), (21, 62475),

Gene: Gorko\_81 Start: 61813, Stop: 61532, Start Num: 3

Candidate Starts for Gorko\_81:

(Start: 2 @61819 has 5 MA's), (Start: 3 @61813 has 6 MA's), (5, 61774), (7, 61738), (9, 61714), (12, 61678), (15, 61645), (16, 61639), (17, 61624), (18, 61621), (21, 61576),

Gene: GourdThymes\_82 Start: 62759, Stop: 62472, Start Num: 2

Candidate Starts for GourdThymes\_82:

(Start: 2 @62759 has 5 MA's), (Start: 3 @62753 has 6 MA's), (5, 62714), (7, 62678), (9, 62654), (12, 62618), (15, 62585), (16, 62579), (17, 62564), (18, 62561), (21, 62516),

Gene: Hotorobo\_82 Start: 62776, Stop: 62495, Start Num: 3

Candidate Starts for Hotorobo\_82:

(Start: 2 @62782 has 5 MA's), (Start: 3 @62776 has 6 MA's), (5, 62737), (7, 62701), (9, 62677), (12, 62641), (15, 62608), (16, 62602), (17, 62587), (18, 62584), (21, 62539),

Gene: John316\_85 Start: 63870, Stop: 63583, Start Num: 2

Candidate Starts for John316\_85:

(Start: 2 @63870 has 5 MA's), (Start: 3 @63864 has 6 MA's), (5, 63825), (7, 63789), (9, 63765), (12, 63729), (15, 63696), (16, 63690), (17, 63675), (18, 63672), (21, 63627),

Gene: Linetti\_81 Start: 63553, Stop: 63254, Start Num: 1

Candidate Starts for Linetti\_81:

(Start: 1 @63553 has 5 MA's), (Start: 2 @63538 has 5 MA's), (7, 63460), (9, 63436), (10, 63433), (11, 63430), (13, 63391), (14, 63373), (15, 63367), (16, 63361), (18, 63343), (19, 63337), (20, 63322),

Gene: Lizzo\_82 Start: 62726, Stop: 62445, Start Num: 3

Candidate Starts for Lizzo\_82:

(Start: 2 @62732 has 5 MA's), (Start: 3 @62726 has 6 MA's), (5, 62687), (7, 62651), (9, 62627), (12, 62591), (15, 62558), (16, 62552), (17, 62537), (18, 62534), (21, 62489),

Gene: Monty\_81 Start: 61945, Stop: 61658, Start Num: 2

Candidate Starts for Monty\_81:

(Start: 2 @61945 has 5 MA's), (Start: 3 @61939 has 6 MA's), (5, 61900), (7, 61864), (9, 61840), (12, 61804), (15, 61771), (16, 61765), (17, 61750), (18, 61747), (21, 61702),

Gene: PierreThree\_80 Start: 62957, Stop: 62658, Start Num: 1

Candidate Starts for PierreThree\_80:

(Start: 1 @62957 has 5 MA's), (Start: 2 @62942 has 5 MA's), (4, 62912), (6, 62897), (9, 62840), (10, 62837), (11, 62834), (13, 62795), (14, 62777), (15, 62771), (16, 62765), (18, 62747), (19, 62741), (20, 62726),

Gene: RemRem\_83 Start: 61879, Stop: 61598, Start Num: 3

Candidate Starts for RemRem\_83:

(Start: 2 @61885 has 5 MA's), (Start: 3 @61879 has 6 MA's), (5, 61840), (7, 61804), (9, 61780), (12, 61744), (15, 61711), (16, 61705), (17, 61690), (18, 61687), (21, 61642),

Gene: Squibbles\_81 Start: 62756, Stop: 62475, Start Num: 3

Candidate Starts for Squibbles\_81:

(Start: 2 @62762 has 5 MA's), (Start: 3 @62756 has 6 MA's), (5, 62717), (7, 62681), (9, 62657), (12, 62621), (15, 62588), (16, 62582), (17, 62567), (18, 62564), (21, 62519),