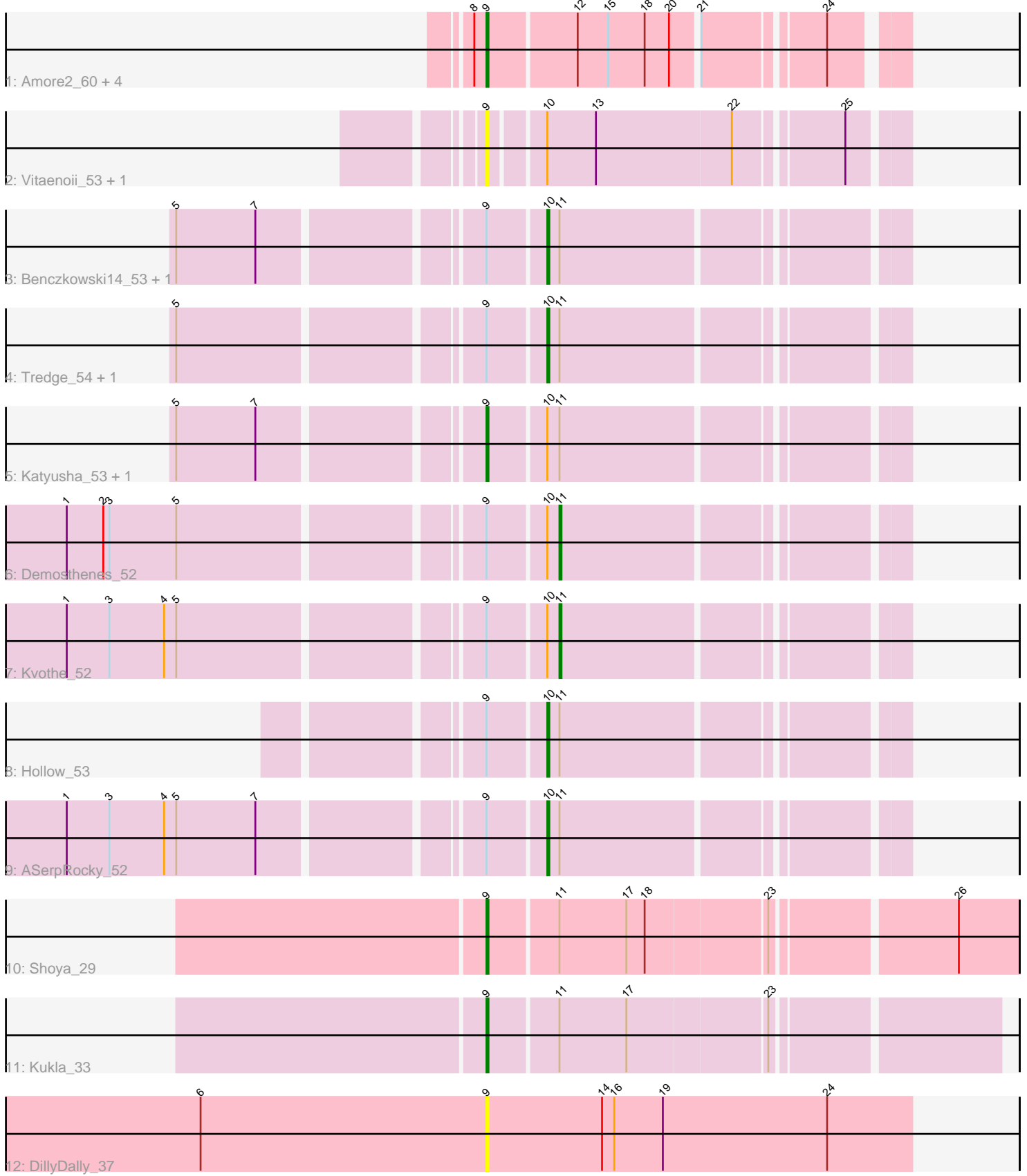


Pham 203325



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 203325 Report

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

Pham number 203325 has 20 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Amore2\_60, GMA7\_49, HayZem\_60, GTE7\_48, Austin\_59
- Track 2 : Vitaenoi\_53, Philon9\_53
- Track 3 : Benczkowski14\_53, Niagara\_53
- Track 4 : Tredge\_54, Teatealatte\_54
- Track 5 : Katyusha\_53, Teech\_53
- Track 6 : Demosthenes\_52
- Track 7 : Kvothe\_52
- Track 8 : Hollow\_53
- Track 9 : ASerpRocky\_52
- Track 10 : Shoya\_29
- Track 11 : Kukla\_33
- Track 12 : DillyDally\_37

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

The start number called the most often in the published annotations is 10, it was called in 6 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASerpRocky\_52, Benczkowski14\_53, Hollow\_53, Niagara\_53, Teatealatte\_54, Tredge\_54,

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

- Demosthenes\_52, Katyusha\_53, Kvothe\_52, Philon9\_53, Teech\_53, Vitaenoi\_53,

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

- Amore2\_60, Austin\_59, DillyDally\_37, GMA7\_49, GTE7\_48, HayZem\_60, Kukla\_33, Shoya\_29,

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

Start 9:

- Found in 20 of 20 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 6 of 14

- Called 60.0% of time when present
- Phage (with cluster) where this start called: Amore2\_60 (CS1), Austin\_59 (CS1), DillyDally\_37 (singleton), GMA7\_49 (CS1), GTE7\_48 (CS1), HayZem\_60 (CS1), Katyusha\_53 (CS4), Kukla\_33 (FJ), Philon9\_53 (CS4), Shoya\_29 (FB), Teech\_53 (CS4), Vitaenoi\_53 (CS4),

Start 10:

- Found in 12 of 20 ( 60.0% ) of genes in pham
- Manual Annotations of this start: 6 of 14
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky\_52 (CS4), Benczkowski14\_53 (CS4), Hollow\_53 (CS4), Niagara\_53 (CS4), Teatealatte\_54 (CS4), Tredge\_54 (CS4),

Start 11:

- Found in 12 of 20 ( 60.0% ) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Demosthenes\_52 (CS4), Kvothe\_52 (CS4),

### **Summary by clusters:**

There are 5 clusters represented in this pham: CS4, FB, CS1, FJ, singleton,

Info for manual annotations of cluster CS1:

- Start number 9 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS4:

- Start number 9 was manually annotated 1 time for cluster CS4.
- Start number 10 was manually annotated 6 times for cluster CS4.
- Start number 11 was manually annotated 2 times for cluster CS4.

Info for manual annotations of cluster FB:

- Start number 9 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FJ:

- Start number 9 was manually annotated 1 time for cluster FJ.

### **Gene Information:**

Gene: ASerpRocky\_52 Start: 50628, Stop: 50467, Start Num: 10

Candidate Starts for ASerpRocky\_52:

(1, 50847), (3, 50826), (4, 50799), (5, 50793), (7, 50754), (Start: 9 @50655 has 6 MA's), (Start: 10 @50628 has 6 MA's), (Start: 11 @50622 has 2 MA's),

Gene: Amore2\_60 Start: 50552, Stop: 50367, Start Num: 9

Candidate Starts for Amore2\_60:

(8, 50558), (Start: 9 @50552 has 6 MA's), (12, 50510), (15, 50495), (18, 50477), (20, 50465), (21, 50453), (24, 50399),

Gene: Austin\_59 Start: 50550, Stop: 50365, Start Num: 9

Candidate Starts for Austin\_59:

(8, 50556), (Start: 9 @50550 has 6 MA's), (12, 50508), (15, 50493), (18, 50475), (20, 50463), (21, 50451), (24, 50397),

Gene: Benczkowski14\_53 Start: 50899, Stop: 50738, Start Num: 10

Candidate Starts for Benczkowski14\_53:

(5, 51064), (7, 51025), (Start: 9 @50926 has 6 MA's), (Start: 10 @50899 has 6 MA's), (Start: 11 @50893 has 2 MA's),

Gene: Demosthenes\_52 Start: 50598, Stop: 50443, Start Num: 11

Candidate Starts for Demosthenes\_52:

(1, 50823), (2, 50805), (3, 50802), (5, 50769), (Start: 9 @50631 has 6 MA's), (Start: 10 @50604 has 6 MA's), (Start: 11 @50598 has 2 MA's),

Gene: DillyDally\_37 Start: 26012, Stop: 26221, Start Num: 9

Candidate Starts for DillyDally\_37:

(6, 25871), (Start: 9 @26012 has 6 MA's), (14, 26069), (16, 26075), (19, 26099), (24, 26180),

Gene: GMA7\_49 Start: 44766, Stop: 44581, Start Num: 9

Candidate Starts for GMA7\_49:

(8, 44772), (Start: 9 @44766 has 6 MA's), (12, 44724), (15, 44709), (18, 44691), (20, 44679), (21, 44667), (24, 44613),

Gene: GTE7\_48 Start: 44797, Stop: 44612, Start Num: 9

Candidate Starts for GTE7\_48:

(8, 44803), (Start: 9 @44797 has 6 MA's), (12, 44755), (15, 44740), (18, 44722), (20, 44710), (21, 44698), (24, 44644),

Gene: HayZem\_60 Start: 50549, Stop: 50364, Start Num: 9

Candidate Starts for HayZem\_60:

(8, 50555), (Start: 9 @50549 has 6 MA's), (12, 50507), (15, 50492), (18, 50474), (20, 50462), (21, 50450), (24, 50396),

Gene: Hollow\_53 Start: 51080, Stop: 50919, Start Num: 10

Candidate Starts for Hollow\_53:

(Start: 9 @51107 has 6 MA's), (Start: 10 @51080 has 6 MA's), (Start: 11 @51074 has 2 MA's),

Gene: Katyusha\_53 Start: 50926, Stop: 50738, Start Num: 9

Candidate Starts for Katyusha\_53:

(5, 51064), (7, 51025), (Start: 9 @50926 has 6 MA's), (Start: 10 @50899 has 6 MA's), (Start: 11 @50893 has 2 MA's),

Gene: Kukla\_33 Start: 26271, Stop: 26035, Start Num: 9

Candidate Starts for Kukla\_33:

(Start: 9 @26271 has 6 MA's), (Start: 11 @26238 has 2 MA's), (17, 26205), (23, 26139),

Gene: Kvothe\_52 Start: 50792, Stop: 50637, Start Num: 11

Candidate Starts for Kvothe\_52:

(1, 51017), (3, 50996), (4, 50969), (5, 50963), (Start: 9 @50825 has 6 MA's), (Start: 10 @50798 has 6 MA's), (Start: 11 @50792 has 2 MA's),

Gene: Niagara\_53 Start: 50889, Stop: 50728, Start Num: 10

Candidate Starts for Niagara\_53:

(5, 51054), (7, 51015), (Start: 9 @50916 has 6 MA's), (Start: 10 @50889 has 6 MA's), (Start: 11 @50883 has 2 MA's),

Gene: Philon9\_53 Start: 51773, Stop: 51585, Start Num: 9

Candidate Starts for Philon9\_53:

(Start: 9 @51773 has 6 MA's), (Start: 10 @51749 has 6 MA's), (13, 51725), (22, 51659), (25, 51611),

Gene: Shoya\_29 Start: 22392, Stop: 22147, Start Num: 9

Candidate Starts for Shoya\_29:

(Start: 9 @22392 has 6 MA's), (Start: 11 @22359 has 2 MA's), (17, 22326), (18, 22317), (23, 22260), (26, 22176),

Gene: Teatealatte\_54 Start: 50801, Stop: 50640, Start Num: 10

Candidate Starts for Teatealatte\_54:

(5, 50966), (Start: 9 @50828 has 6 MA's), (Start: 10 @50801 has 6 MA's), (Start: 11 @50795 has 2 MA's),

Gene: Teech\_53 Start: 50629, Stop: 50441, Start Num: 9

Candidate Starts for Teech\_53:

(5, 50767), (7, 50728), (Start: 9 @50629 has 6 MA's), (Start: 10 @50602 has 6 MA's), (Start: 11 @50596 has 2 MA's),

Gene: Tredge\_54 Start: 50801, Stop: 50640, Start Num: 10

Candidate Starts for Tredge\_54:

(5, 50966), (Start: 9 @50828 has 6 MA's), (Start: 10 @50801 has 6 MA's), (Start: 11 @50795 has 2 MA's),

Gene: Vitaenoi\_53 Start: 51772, Stop: 51584, Start Num: 9

Candidate Starts for Vitaenoi\_53:

(Start: 9 @51772 has 6 MA's), (Start: 10 @51748 has 6 MA's), (13, 51724), (22, 51658), (25, 51610),