



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 211274 Report

This analysis was run 02/22/25 on database version 588.

Pham number 211274 has 33 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Exiguo\_2, Jellybones\_2, Sam12\_2
- Track 2 : BenoitCattle\_2
- Track 3 : Lizzo\_2, CathyBurgh\_2, GourdThymes\_2
- Track 4 : Diabla\_2
- Track 5 : PokyPuppy\_2
- Track 6 : Hotorobo\_2, Breezic\_2, Beaver\_2, CinnamonToast\_3, Worcestershire\_2, RemRem\_2, SteveFrench\_2
- Track 7 : Adgers\_2, Msay19\_2, Poland\_2
- Track 8 : Squibbles\_2
- Track 9 : Eggsie\_2
- Track 10 : Gorko\_2, John316\_2, Flakey\_2
- Track 11 : Ekhein\_2, BirksAndSocks\_2, Boneham\_2
- Track 12 : RoyalG\_2
- Track 13 : Butterball\_2
- Track 14 : Monty\_2
- Track 15 : FelixAlejandro\_2
- Track 16 : Sombrero\_2
- Track 17 : Barbochs\_2

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

The start number called the most often in the published annotations is 6, it was called in 25 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adgers\_2, Barbochs\_2, Beaver\_2, BenoitCattle\_2, BirksAndSocks\_2, Boneham\_2, Breezic\_2, CathyBurgh\_2, CinnamonToast\_3, Diabla\_2, Eggsie\_2, Ekhein\_2, Exiguo\_2, Flakey\_2, Gorko\_2, GourdThymes\_2, Hotorobo\_2, Jellybones\_2, John316\_2, Lizzo\_2, Monty\_2, Msay19\_2, PokyPuppy\_2, Poland\_2, RemRem\_2, Sam12\_2, Sombrero\_2, Squibbles\_2, SteveFrench\_2, Worcestershire\_2,

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

- Butterball\_2,

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

- FelixAlejandro\_2, RoyalG\_2,

### Summary by start number:

Start 5:

- Found in 2 of 33 ( 6.1% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FelixAlejandro\_2 (CS2), RoyalG\_2 (CS2),

Start 6:

- Found in 31 of 33 ( 93.9% ) of genes in pham
- Manual Annotations of this start: 25 of 28
- Called 96.8% of time when present
- Phage (with cluster) where this start called: Adgers\_2 (CS2), Barbochs\_2 (CS2), Beaver\_2 (CS2), BenoitCattle\_2 (CS2), BirksAndSocks\_2 (CS2), Boneham\_2 (CS2), Breezic\_2 (CS2), CathyBurgh\_2 (CS2), CinnamonToast\_3 (CS2), Diabla\_2 (CS2), Eggie\_2 (CS2), Ekhein\_2 (CS2), Exiguo\_2 (CS2), Flakey\_2 (CS2), Gorko\_2 (CS2), GourdThymes\_2 (CS2), Hotorobo\_2 (CS2), Jellybones\_2 (CS2), John316\_2 (CS2), Lizzo\_2 (CS2), Monty\_2 (CS2), Msay19\_2 (CS2), PokyPuppy\_2 (CS2), Poland\_2 (CS2), RemRem\_2 (CS2), Sam12\_2 (CS2), Sombrero\_2 (CS2), Squibbles\_2 (CS2), SteveFrench\_2 (CS2), Worcestershire\_2 (CS2),

Start 10:

- Found in 33 of 33 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 3.0% of time when present
- Phage (with cluster) where this start called: Butterball\_2 (CS2),

### Summary by clusters:

There is one cluster represented in this pham: CS2

Info for manual annotations of cluster CS2:

- Start number 5 was manually annotated 2 times for cluster CS2.
- Start number 6 was manually annotated 25 times for cluster CS2.
- Start number 10 was manually annotated 1 time for cluster CS2.

### Gene Information:

Gene: Adgers\_2 Start: 1542, Stop: 1279, Start Num: 6

Candidate Starts for Adgers\_2:

(Start: 6 @1542 has 25 MA's), (Start: 10 @1473 has 1 MA's), (18, 1422), (19, 1416),

Gene: Barbochs\_2 Start: 1543, Stop: 1280, Start Num: 6

Candidate Starts for Barbochs\_2:

(2, 1693), (3, 1678), (Start: 6 @1543 has 25 MA's), (Start: 10 @1474 has 1 MA's), (11, 1465),

Gene: Beaver\_2 Start: 1554, Stop: 1291, Start Num: 6

Candidate Starts for Beaver\_2:

(1, 1911), (2, 1704), (3, 1689), (Start: 6 @1554 has 25 MA's), (Start: 10 @1485 has 1 MA's), (18, 1434), (19, 1428),

Gene: BenoitCattle\_2 Start: 1535, Stop: 1272, Start Num: 6

Candidate Starts for BenoitCattle\_2:

(3, 1670), (Start: 6 @1535 has 25 MA's), (Start: 10 @1466 has 1 MA's), (13, 1445), (21, 1283),

Gene: BirksAndSocks\_2 Start: 1543, Stop: 1280, Start Num: 6

Candidate Starts for BirksAndSocks\_2:

(2, 1693), (3, 1678), (Start: 6 @1543 has 25 MA's), (Start: 10 @1474 has 1 MA's), (18, 1423),

Gene: Boneham\_2 Start: 1542, Stop: 1279, Start Num: 6

Candidate Starts for Boneham\_2:

(2, 1692), (3, 1677), (Start: 6 @1542 has 25 MA's), (Start: 10 @1473 has 1 MA's), (18, 1422),

Gene: Breezic\_2 Start: 1554, Stop: 1291, Start Num: 6

Candidate Starts for Breezic\_2:

(1, 1911), (2, 1704), (3, 1689), (Start: 6 @1554 has 25 MA's), (Start: 10 @1485 has 1 MA's), (18, 1434), (19, 1428),

Gene: Butterball\_2 Start: 1473, Stop: 1279, Start Num: 10

Candidate Starts for Butterball\_2:

(Start: 6 @1542 has 25 MA's), (Start: 10 @1473 has 1 MA's), (11, 1464),

Gene: CathyBurgh\_2 Start: 1542, Stop: 1279, Start Num: 6

Candidate Starts for CathyBurgh\_2:

(Start: 6 @1542 has 25 MA's), (Start: 10 @1473 has 1 MA's), (11, 1464),

Gene: CinnamonToast\_3 Start: 1578, Stop: 1315, Start Num: 6

Candidate Starts for CinnamonToast\_3:

(1, 1935), (2, 1728), (3, 1713), (Start: 6 @1578 has 25 MA's), (Start: 10 @1509 has 1 MA's), (18, 1458), (19, 1452),

Gene: Diabla\_2 Start: 1547, Stop: 1293, Start Num: 6

Candidate Starts for Diabla\_2:

(3, 1682), (Start: 6 @1547 has 25 MA's), (8, 1499), (9, 1490), (Start: 10 @1487 has 1 MA's), (12, 1472), (17, 1445), (18, 1436), (22, 1301),

Gene: Eggsie\_2 Start: 1536, Stop: 1282, Start Num: 6

Candidate Starts for Eggsie\_2:

(2, 1686), (3, 1671), (Start: 6 @1536 has 25 MA's), (8, 1488), (9, 1479), (Start: 10 @1476 has 1 MA's), (12, 1461), (16, 1437), (17, 1434), (18, 1425),

Gene: Ekhein\_2 Start: 1542, Stop: 1279, Start Num: 6

Candidate Starts for Ekhein\_2:

(2, 1692), (3, 1677), (Start: 6 @1542 has 25 MA's), (Start: 10 @1473 has 1 MA's), (18, 1422),

Gene: Exiguo\_2 Start: 1554, Stop: 1291, Start Num: 6

Candidate Starts for Exiguo\_2:

(2, 1704), (3, 1689), (Start: 6 @1554 has 25 MA's), (Start: 10 @1485 has 1 MA's), (18, 1434), (19, 1428),

Gene: FelixAlejandro\_2 Start: 1576, Stop: 1313, Start Num: 5  
Candidate Starts for FelixAlejandro\_2:  
(4, 1630), (Start: 5 @1576 has 2 MA's), (Start: 10 @1507 has 1 MA's), (18, 1456),

Gene: Flakey\_2 Start: 1543, Stop: 1280, Start Num: 6  
Candidate Starts for Flakey\_2:  
(2, 1693), (3, 1678), (Start: 6 @1543 has 25 MA's), (Start: 10 @1474 has 1 MA's), (11, 1465), (18, 1423),

Gene: Gorko\_2 Start: 1543, Stop: 1280, Start Num: 6  
Candidate Starts for Gorko\_2:  
(2, 1693), (3, 1678), (Start: 6 @1543 has 25 MA's), (Start: 10 @1474 has 1 MA's), (11, 1465), (18, 1423),

Gene: GourdThymes\_2 Start: 1542, Stop: 1279, Start Num: 6  
Candidate Starts for GourdThymes\_2:  
(Start: 6 @1542 has 25 MA's), (Start: 10 @1473 has 1 MA's), (11, 1464),

Gene: Hotorobo\_2 Start: 1553, Stop: 1290, Start Num: 6  
Candidate Starts for Hotorobo\_2:  
(1, 1910), (2, 1703), (3, 1688), (Start: 6 @1553 has 25 MA's), (Start: 10 @1484 has 1 MA's), (18, 1433), (19, 1427),

Gene: Jellybones\_2 Start: 1577, Stop: 1314, Start Num: 6  
Candidate Starts for Jellybones\_2:  
(2, 1727), (3, 1712), (Start: 6 @1577 has 25 MA's), (Start: 10 @1508 has 1 MA's), (18, 1457), (19, 1451),

Gene: John316\_2 Start: 1542, Stop: 1279, Start Num: 6  
Candidate Starts for John316\_2:  
(2, 1692), (3, 1677), (Start: 6 @1542 has 25 MA's), (Start: 10 @1473 has 1 MA's), (11, 1464), (18, 1422),

Gene: Lizzo\_2 Start: 1542, Stop: 1279, Start Num: 6  
Candidate Starts for Lizzo\_2:  
(Start: 6 @1542 has 25 MA's), (Start: 10 @1473 has 1 MA's), (11, 1464),

Gene: Monty\_2 Start: 1555, Stop: 1292, Start Num: 6  
Candidate Starts for Monty\_2:  
(2, 1705), (3, 1690), (Start: 6 @1555 has 25 MA's), (Start: 10 @1486 has 1 MA's), (18, 1435), (19, 1429),

Gene: Msay19\_2 Start: 1566, Stop: 1303, Start Num: 6  
Candidate Starts for Msay19\_2:  
(Start: 6 @1566 has 25 MA's), (Start: 10 @1497 has 1 MA's), (18, 1446), (19, 1440),

Gene: PokyPuppy\_2 Start: 1632, Stop: 1378, Start Num: 6  
Candidate Starts for PokyPuppy\_2:  
(3, 1761), (Start: 6 @1632 has 25 MA's), (7, 1593), (8, 1584), (9, 1575), (Start: 10 @1572 has 1 MA's), (12, 1557), (15, 1536), (17, 1530), (20, 1485),

Gene: Poland\_2 Start: 1542, Stop: 1279, Start Num: 6  
Candidate Starts for Poland\_2:

(Start: 6 @1542 has 25 MA's), (Start: 10 @1473 has 1 MA's), (18, 1422), (19, 1416),

Gene: RemRem\_2 Start: 1554, Stop: 1291, Start Num: 6

Candidate Starts for RemRem\_2:

(1, 1911), (2, 1704), (3, 1689), (Start: 6 @1554 has 25 MA's), (Start: 10 @1485 has 1 MA's), (18, 1434), (19, 1428),

Gene: RoyalG\_2 Start: 1567, Stop: 1304, Start Num: 5

Candidate Starts for RoyalG\_2:

(4, 1621), (Start: 5 @1567 has 2 MA's), (Start: 10 @1498 has 1 MA's),

Gene: Sam12\_2 Start: 1554, Stop: 1291, Start Num: 6

Candidate Starts for Sam12\_2:

(2, 1704), (3, 1689), (Start: 6 @1554 has 25 MA's), (Start: 10 @1485 has 1 MA's), (18, 1434), (19, 1428),

Gene: Sombrero\_2 Start: 1588, Stop: 1325, Start Num: 6

Candidate Starts for Sombrero\_2:

(1, 1945), (2, 1738), (3, 1723), (Start: 6 @1588 has 25 MA's), (7, 1540), (Start: 10 @1519 has 1 MA's), (14, 1495), (19, 1462),

Gene: Squibbles\_2 Start: 1542, Stop: 1279, Start Num: 6

Candidate Starts for Squibbles\_2:

(Start: 6 @1542 has 25 MA's), (Start: 10 @1473 has 1 MA's), (11, 1464), (18, 1422),

Gene: SteveFrench\_2 Start: 1554, Stop: 1291, Start Num: 6

Candidate Starts for SteveFrench\_2:

(1, 1911), (2, 1704), (3, 1689), (Start: 6 @1554 has 25 MA's), (Start: 10 @1485 has 1 MA's), (18, 1434), (19, 1428),

Gene: Worcestershire\_2 Start: 1553, Stop: 1290, Start Num: 6

Candidate Starts for Worcestershire\_2:

(1, 1910), (2, 1703), (3, 1688), (Start: 6 @1553 has 25 MA's), (Start: 10 @1484 has 1 MA's), (18, 1433), (19, 1427),