



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 296882 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296882 has 25 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Rufus\_4, Burton\_4, Acme\_5, Fajezeel\_5, Pippin\_5, Greg\_5
- Track 2 : Briton15\_4
- Track 3 : Slagathor\_4, RidgeCB\_4, Museum\_5, Arcanine\_4, Rubeus\_4, Ohno789\_3, NEHalo\_4, Molly\_5
- Track 4 : Seabiscuit\_4
- Track 5 : DreamCatcher\_5, PattyP\_5, Atkinbua\_4
- Track 6 : Petruccio\_4
- Track 7 : Paphu\_3
- Track 8 : Petp2012\_5, HermioneGrange\_4
- Track 9 : Sibs6\_5
- Track 10 : KSSJEB\_3

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

The start number called the most often in the published annotations is 1, it was called in 23 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acme\_5, Arcanine\_4, Atkinbua\_4, Briton15\_4, Burton\_4, DreamCatcher\_5, Fajezeel\_5, Greg\_5, HermioneGrange\_4, Molly\_5, Museum\_5, NEHalo\_4, Ohno789\_3, Paphu\_3, PattyP\_5, Petp2012\_5, Petruccio\_4, Pippin\_5, RidgeCB\_4, Rubeus\_4, Rufus\_4, Seabiscuit\_4, Slagathor\_4,

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

- KSSJEB\_3, Sibs6\_5,

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

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

Start 1:

- Found in 25 of 25 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 23 of 25

- Called 92.0% of time when present
- Phage (with cluster) where this start called: Acme\_5 (A1), Arcanine\_4 (A1), Atkinbua\_4 (A1), Briton15\_4 (A1), Burton\_4 (A1), DreamCatcher\_5 (A1), Fajezeel\_5 (A1), Greg\_5 (A1), HermioneGrange\_4 (A1), Molly\_5 (A1), Museum\_5 (A1), NEHalo\_4 (A1), Ohno789\_3 (A1), Paphu\_3 (A1), PattyP\_5 (A1), Petp2012\_5 (A1), Petruccio\_4 (A1), Pippin\_5 (A1), RidgeCB\_4 (A1), Rubeus\_4 (A1), Rufus\_4 (A1), Seabiscuit\_4 (A1), Slagathor\_4 (A1),

Start 2:

- Found in 21 of 25 ( 84.0% ) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 9.5% of time when present
- Phage (with cluster) where this start called: KSSJEB\_3 (A1), Sibs6\_5 (A1),

### Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:

- Start number 1 was manually annotated 23 times for cluster A1.
- Start number 2 was manually annotated 2 times for cluster A1.

### Gene Information:

Gene: Acme\_5 Start: 1765, Stop: 2055, Start Num: 1

Candidate Starts for Acme\_5:

(Start: 1 @1765 has 23 MA's), (Start: 2 @1783 has 2 MA's), (3, 1882), (4, 1897), (5, 1924), (6, 1951), (7, 2017),

Gene: Arcanine\_4 Start: 1541, Stop: 1852, Start Num: 1

Candidate Starts for Arcanine\_4:

(Start: 1 @1541 has 23 MA's), (Start: 2 @1559 has 2 MA's), (3, 1658), (4, 1673), (5, 1700), (6, 1727), (7, 1793),

Gene: Atkinbua\_4 Start: 1586, Stop: 1867, Start Num: 1

Candidate Starts for Atkinbua\_4:

(Start: 1 @1586 has 23 MA's), (Start: 2 @1604 has 2 MA's), (3, 1703), (4, 1718), (5, 1745), (6, 1772), (7, 1838),

Gene: Briton15\_4 Start: 1591, Stop: 1959, Start Num: 1

Candidate Starts for Briton15\_4:

(Start: 1 @1591 has 23 MA's), (3, 1708), (4, 1723), (5, 1750), (6, 1777), (7, 1843), (8, 1921),

Gene: Burton\_4 Start: 1600, Stop: 1890, Start Num: 1

Candidate Starts for Burton\_4:

(Start: 1 @1600 has 23 MA's), (Start: 2 @1618 has 2 MA's), (3, 1717), (4, 1732), (5, 1759), (6, 1786), (7, 1852),

Gene: DreamCatcher\_5 Start: 2315, Stop: 2596, Start Num: 1

Candidate Starts for DreamCatcher\_5:

(Start: 1 @2315 has 23 MA's), (Start: 2 @2333 has 2 MA's), (3, 2432), (4, 2447), (5, 2474), (6, 2501), (7, 2567),

Gene: Fajezeel\_5 Start: 1733, Stop: 2023, Start Num: 1

Candidate Starts for Fajezeel\_5:

(Start: 1 @1733 has 23 MA's), (Start: 2 @1751 has 2 MA's), (3, 1850), (4, 1865), (5, 1892), (6, 1919), (7, 1985),

Gene: Greg\_5 Start: 1733, Stop: 2023, Start Num: 1

Candidate Starts for Greg\_5:

(Start: 1 @1733 has 23 MA's), (Start: 2 @1751 has 2 MA's), (3, 1850), (4, 1865), (5, 1892), (6, 1919), (7, 1985),

Gene: HermioneGrange\_4 Start: 1541, Stop: 1909, Start Num: 1

Candidate Starts for HermioneGrange\_4:

(Start: 1 @1541 has 23 MA's), (3, 1658), (4, 1673), (5, 1700), (6, 1727), (7, 1793), (8, 1871),

Gene: KSSJEB\_3 Start: 1475, Stop: 1747, Start Num: 2

Candidate Starts for KSSJEB\_3:

(Start: 1 @1457 has 23 MA's), (Start: 2 @1475 has 2 MA's), (3, 1574), (4, 1589), (5, 1616), (6, 1643), (7, 1709),

Gene: Molly\_5 Start: 1739, Stop: 2029, Start Num: 1

Candidate Starts for Molly\_5:

(Start: 1 @1739 has 23 MA's), (Start: 2 @1757 has 2 MA's), (3, 1856), (4, 1871), (5, 1898), (6, 1925), (7, 1991),

Gene: Museum\_5 Start: 1539, Stop: 1829, Start Num: 1

Candidate Starts for Museum\_5:

(Start: 1 @1539 has 23 MA's), (Start: 2 @1557 has 2 MA's), (3, 1656), (4, 1671), (5, 1698), (6, 1725), (7, 1791),

Gene: NEHalo\_4 Start: 1532, Stop: 1843, Start Num: 1

Candidate Starts for NEHalo\_4:

(Start: 1 @1532 has 23 MA's), (Start: 2 @1550 has 2 MA's), (3, 1649), (4, 1664), (5, 1691), (6, 1718), (7, 1784),

Gene: Ohno789\_3 Start: 1382, Stop: 1672, Start Num: 1

Candidate Starts for Ohno789\_3:

(Start: 1 @1382 has 23 MA's), (Start: 2 @1400 has 2 MA's), (3, 1499), (4, 1514), (5, 1541), (6, 1568), (7, 1634),

Gene: Paphu\_3 Start: 1419, Stop: 1709, Start Num: 1

Candidate Starts for Paphu\_3:

(Start: 1 @1419 has 23 MA's), (Start: 2 @1437 has 2 MA's), (3, 1536), (4, 1551), (5, 1578), (6, 1605), (7, 1671),

Gene: PattyP\_5 Start: 1734, Stop: 2024, Start Num: 1

Candidate Starts for PattyP\_5:

(Start: 1 @1734 has 23 MA's), (Start: 2 @1752 has 2 MA's), (3, 1851), (4, 1866), (5, 1893), (6, 1920), (7, 1986),

Gene: Petp2012\_5 Start: 1742, Stop: 2110, Start Num: 1

Candidate Starts for Petp2012\_5:

(Start: 1 @1742 has 23 MA's), (3, 1859), (4, 1874), (5, 1901), (6, 1928), (7, 1994), (8, 2072),

Gene: Petruccio\_4 Start: 1593, Stop: 1883, Start Num: 1

Candidate Starts for Petruccio\_4:

(Start: 1 @1593 has 23 MA's), (Start: 2 @1611 has 2 MA's), (4, 1725), (5, 1752), (6, 1779), (7, 1845),

Gene: Pippin\_5 Start: 1733, Stop: 2023, Start Num: 1

Candidate Starts for Pippin\_5:

(Start: 1 @1733 has 23 MA's), (Start: 2 @1751 has 2 MA's), (3, 1850), (4, 1865), (5, 1892), (6, 1919), (7, 1985),

Gene: RidgeCB\_4 Start: 1539, Stop: 1829, Start Num: 1

Candidate Starts for RidgeCB\_4:

(Start: 1 @1539 has 23 MA's), (Start: 2 @1557 has 2 MA's), (3, 1656), (4, 1671), (5, 1698), (6, 1725), (7, 1791),

Gene: Rubeus\_4 Start: 1539, Stop: 1850, Start Num: 1

Candidate Starts for Rubeus\_4:

(Start: 1 @1539 has 23 MA's), (Start: 2 @1557 has 2 MA's), (3, 1656), (4, 1671), (5, 1698), (6, 1725), (7, 1791),

Gene: Rufus\_4 Start: 1597, Stop: 1887, Start Num: 1

Candidate Starts for Rufus\_4:

(Start: 1 @1597 has 23 MA's), (Start: 2 @1615 has 2 MA's), (3, 1714), (4, 1729), (5, 1756), (6, 1783), (7, 1849),

Gene: Seabiscuit\_4 Start: 1534, Stop: 1902, Start Num: 1

Candidate Starts for Seabiscuit\_4:

(Start: 1 @1534 has 23 MA's), (3, 1651), (4, 1666), (5, 1693), (6, 1720), (7, 1786), (8, 1864),

Gene: Sibs6\_5 Start: 1751, Stop: 2023, Start Num: 2

Candidate Starts for Sibs6\_5:

(Start: 1 @1733 has 23 MA's), (Start: 2 @1751 has 2 MA's), (3, 1850), (4, 1865), (5, 1892), (6, 1919), (7, 1985),

Gene: Slagathor\_4 Start: 1541, Stop: 1852, Start Num: 1

Candidate Starts for Slagathor\_4:

(Start: 1 @1541 has 23 MA's), (Start: 2 @1559 has 2 MA's), (3, 1658), (4, 1673), (5, 1700), (6, 1727), (7, 1793),