

# Pham 163752



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 163752 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163752 has 38 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Bananafish\_65, Calamitous\_65, Eaglehorse\_64, Qyrzula\_58, Boyle\_64, Godines\_65, West99\_64, LizLemon\_64, Arbiter\_62, Kheth\_64, Rhinoforte\_64, Sabella\_64, MasterPo\_65, Laurie\_64, Tres\_64, Rosebush\_63, Ares\_64, Lephleur\_64, Opia\_65, ItsyBitsy1\_63, Glass\_65, FrenchFry\_65, Holeinone\_64, Hedgerow\_64, Blocker23\_64
- Track 2 : Brownie5\_64, Tinciduntolum\_65
- Track 3 : Lars\_65
- Track 4 : Baloo\_67
- Track 5 : BiggityBass\_60
- Track 6 : AnClar\_58
- Track 7 : LittleMunchkin\_63
- Track 8 : Mariokart\_58
- Track 9 : CharlottesWeb\_58
- Track 10 : Sour\_62
- Track 11 : Yago84\_59, Sisko\_60
- Track 12 : Evaa\_60

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

The start number called the most often in the published annotations is 8, it was called in 27 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arbiter\_62, Ares\_64, Bananafish\_65, Blocker23\_64, Boyle\_64, Brownie5\_64, Calamitous\_65, Eaglehorse\_64, FrenchFry\_65, Glass\_65, Godines\_65, Hedgerow\_64, Holeinone\_64, ItsyBitsy1\_63, Kheth\_64, Laurie\_64, Lephleur\_64, LizLemon\_64, MasterPo\_65, Opia\_65, Qyrzula\_58, Rhinoforte\_64, Rosebush\_63, Sabella\_64, Tinciduntolum\_65, Tres\_64, West99\_64,

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

- Baloo\_67, Lars\_65,

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

- AnClar\_58, BiggityBass\_60, CharlottesWeb\_58, Evaa\_60, LittleMunchkin\_63, Mariokart\_58, Sisko\_60, Sour\_62, Yago84\_59,

### Summary by start number:

#### Start 7:

- Found in 5 of 38 ( 13.2% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Mariokart\_58 (DR),

#### Start 8:

- Found in 29 of 38 ( 76.3% ) of genes in pham
- Manual Annotations of this start: 27 of 37
- Called 93.1% of time when present
- Phage (with cluster) where this start called: Arbitrator\_62 (B2), Ares\_64 (B2), Bananafish\_65 (B2), Blocker23\_64 (B2), Boyle\_64 (B2), Brownie5\_64 (B2), Calamitous\_65 (B2), Eaglehorse\_64 (B2), FrenchFry\_65 (B2), Glass\_65 (B2), Godines\_65 (B2), Hedgerow\_64 (B2), Holeinone\_64 (B2), ItsyBitsy1\_63 (B2), Kheth\_64 (B2), Laurie\_64 (B2), Lephleur\_64 (B2), LizLemon\_64 (B2), MasterPo\_65 (B2), Opia\_65 (B2), Qyrzula\_58 (B2), Rhinoforte\_64 (B2), Rosebush\_63 (B2), Sabella\_64 (B2), Tinciduntolum\_65 (B2), Tres\_64 (B2), West99\_64 (B2),

#### Start 9:

- Found in 29 of 38 ( 76.3% ) of genes in pham
- Manual Annotations of this start: 2 of 37
- Called 6.9% of time when present
- Phage (with cluster) where this start called: Baloo\_67 (B3), Lars\_65 (B2),

#### Start 10:

- Found in 1 of 38 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evaa\_60 (DR),

#### Start 12:

- Found in 9 of 38 ( 23.7% ) of genes in pham
- Manual Annotations of this start: 6 of 37
- Called 77.8% of time when present
- Phage (with cluster) where this start called: AnClar\_58 (DR), BiggityBass\_60 (DR), CharlottesWeb\_58 (DR), LittleMunchkin\_63 (DR), Sisko\_60 (DR), Sour\_62 (DR), Yago84\_59 (DR),

### Summary by clusters:

There are 3 clusters represented in this pham: DR, B2, B3,

#### Info for manual annotations of cluster B2:

- Start number 8 was manually annotated 27 times for cluster B2.
- Start number 9 was manually annotated 1 time for cluster B2.

#### Info for manual annotations of cluster B3:

- Start number 9 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster DR:

- Start number 7 was manually annotated 1 time for cluster DR.
- Start number 10 was manually annotated 1 time for cluster DR.
- Start number 12 was manually annotated 6 times for cluster DR.

**Gene Information:**

Gene: AnClar\_58 Start: 51779, Stop: 51976, Start Num: 12

Candidate Starts for AnClar\_58:

(Start: 7 @51743 has 1 MA's), (Start: 12 @51779 has 6 MA's), (19, 51857), (22, 51878), (29, 51938), (31, 51965),

Gene: Arbiter\_62 Start: 55569, Stop: 55829, Start Num: 8

Candidate Starts for Arbiter\_62:

(Start: 8 @55569 has 27 MA's), (Start: 9 @55578 has 2 MA's), (15, 55623), (16, 55650), (17, 55677), (21, 55704), (26, 55746), (28, 55779), (29, 55788), (30, 55800),

Gene: Ares\_64 Start: 55540, Stop: 55800, Start Num: 8

Candidate Starts for Ares\_64:

(Start: 8 @55540 has 27 MA's), (Start: 9 @55549 has 2 MA's), (15, 55594), (16, 55621), (17, 55648), (21, 55675), (26, 55717), (28, 55750), (29, 55759), (30, 55771),

Gene: Baloo\_67 Start: 57118, Stop: 57366, Start Num: 9

Candidate Starts for Baloo\_67:

(1, 56857), (2, 56875), (3, 56887), (4, 56932), (5, 57067), (6, 57079), (Start: 7 @57097 has 1 MA's), (Start: 8 @57109 has 27 MA's), (Start: 9 @57118 has 2 MA's), (11, 57127), (23, 57271), (29, 57328),

Gene: Bananafish\_65 Start: 55470, Stop: 55730, Start Num: 8

Candidate Starts for Bananafish\_65:

(Start: 8 @55470 has 27 MA's), (Start: 9 @55479 has 2 MA's), (15, 55524), (16, 55551), (17, 55578), (21, 55605), (26, 55647), (28, 55680), (29, 55689), (30, 55701),

Gene: BiggityBass\_60 Start: 52323, Stop: 52532, Start Num: 12

Candidate Starts for BiggityBass\_60:

(Start: 12 @52323 has 6 MA's), (19, 52413), (29, 52494), (31, 52521),

Gene: Blocker23\_64 Start: 55537, Stop: 55797, Start Num: 8

Candidate Starts for Blocker23\_64:

(Start: 8 @55537 has 27 MA's), (Start: 9 @55546 has 2 MA's), (15, 55591), (16, 55618), (17, 55645), (21, 55672), (26, 55714), (28, 55747), (29, 55756), (30, 55768),

Gene: Boyle\_64 Start: 55578, Stop: 55838, Start Num: 8

Candidate Starts for Boyle\_64:

(Start: 8 @55578 has 27 MA's), (Start: 9 @55587 has 2 MA's), (15, 55632), (16, 55659), (17, 55686), (21, 55713), (26, 55755), (28, 55788), (29, 55797), (30, 55809),

Gene: Brownie5\_64 Start: 55580, Stop: 55840, Start Num: 8

Candidate Starts for Brownie5\_64:

(Start: 8 @55580 has 27 MA's), (Start: 9 @55589 has 2 MA's), (15, 55634), (17, 55688), (21, 55715), (26, 55757), (28, 55790), (29, 55799), (30, 55811),

Gene: Calamitous\_65 Start: 55468, Stop: 55728, Start Num: 8

Candidate Starts for Calamitous\_65:

(Start: 8 @55468 has 27 MA's), (Start: 9 @55477 has 2 MA's), (15, 55522), (16, 55549), (17, 55576), (21, 55603), (26, 55645), (28, 55678), (29, 55687), (30, 55699),

Gene: CharlottesWeb\_58 Start: 49213, Stop: 49410, Start Num: 12

Candidate Starts for CharlottesWeb\_58:

(Start: 7 @49177 has 1 MA's), (Start: 12 @49213 has 6 MA's), (22, 49315), (29, 49375),

Gene: Eaglehorse\_64 Start: 55458, Stop: 55718, Start Num: 8

Candidate Starts for Eaglehorse\_64:

(Start: 8 @55458 has 27 MA's), (Start: 9 @55467 has 2 MA's), (15, 55512), (16, 55539), (17, 55566), (21, 55593), (26, 55635), (28, 55668), (29, 55677), (30, 55689),

Gene: Evaa\_60 Start: 49769, Stop: 50017, Start Num: 10

Candidate Starts for Evaa\_60:

(Start: 10 @49769 has 1 MA's), (Start: 12 @49775 has 6 MA's), (13, 49784), (14, 49793), (16, 49835), (18, 49874), (20, 49883), (24, 49925), (25, 49928),

Gene: FrenchFry\_65 Start: 55583, Stop: 55843, Start Num: 8

Candidate Starts for FrenchFry\_65:

(Start: 8 @55583 has 27 MA's), (Start: 9 @55592 has 2 MA's), (15, 55637), (16, 55664), (17, 55691), (21, 55718), (26, 55760), (28, 55793), (29, 55802), (30, 55814),

Gene: Glass\_65 Start: 55585, Stop: 55845, Start Num: 8

Candidate Starts for Glass\_65:

(Start: 8 @55585 has 27 MA's), (Start: 9 @55594 has 2 MA's), (15, 55639), (16, 55666), (17, 55693), (21, 55720), (26, 55762), (28, 55795), (29, 55804), (30, 55816),

Gene: Godines\_65 Start: 55844, Stop: 56104, Start Num: 8

Candidate Starts for Godines\_65:

(Start: 8 @55844 has 27 MA's), (Start: 9 @55853 has 2 MA's), (15, 55898), (16, 55925), (17, 55952), (21, 55979), (26, 56021), (28, 56054), (29, 56063), (30, 56075),

Gene: Hedgerow\_64 Start: 55555, Stop: 55815, Start Num: 8

Candidate Starts for Hedgerow\_64:

(Start: 8 @55555 has 27 MA's), (Start: 9 @55564 has 2 MA's), (15, 55609), (16, 55636), (17, 55663), (21, 55690), (26, 55732), (28, 55765), (29, 55774), (30, 55786),

Gene: Holeinone\_64 Start: 55443, Stop: 55703, Start Num: 8

Candidate Starts for Holeinone\_64:

(Start: 8 @55443 has 27 MA's), (Start: 9 @55452 has 2 MA's), (15, 55497), (16, 55524), (17, 55551), (21, 55578), (26, 55620), (28, 55653), (29, 55662), (30, 55674),

Gene: ItsyBitsy1\_63 Start: 55673, Stop: 55933, Start Num: 8

Candidate Starts for ItsyBitsy1\_63:

(Start: 8 @55673 has 27 MA's), (Start: 9 @55682 has 2 MA's), (15, 55727), (16, 55754), (17, 55781), (21, 55808), (26, 55850), (28, 55883), (29, 55892), (30, 55904),

Gene: Kheth\_64 Start: 55502, Stop: 55762, Start Num: 8

Candidate Starts for Kheth\_64:

(Start: 8 @55502 has 27 MA's), (Start: 9 @55511 has 2 MA's), (15, 55556), (16, 55583), (17, 55610), (21, 55637), (26, 55679), (28, 55712), (29, 55721), (30, 55733),

Gene: Lars\_65 Start: 55572, Stop: 55823, Start Num: 9

Candidate Starts for Lars\_65:

(Start: 8 @55563 has 27 MA's), (Start: 9 @55572 has 2 MA's), (15, 55617), (16, 55644), (17, 55671), (21, 55698), (26, 55740), (28, 55773), (29, 55782), (30, 55794),

Gene: Laurie\_64 Start: 55263, Stop: 55523, Start Num: 8

Candidate Starts for Laurie\_64:

(Start: 8 @55263 has 27 MA's), (Start: 9 @55272 has 2 MA's), (15, 55317), (16, 55344), (17, 55371), (21, 55398), (26, 55440), (28, 55473), (29, 55482), (30, 55494),

Gene: Lephleur\_64 Start: 55428, Stop: 55688, Start Num: 8

Candidate Starts for Lephleur\_64:

(Start: 8 @55428 has 27 MA's), (Start: 9 @55437 has 2 MA's), (15, 55482), (16, 55509), (17, 55536), (21, 55563), (26, 55605), (28, 55638), (29, 55647), (30, 55659),

Gene: LittleMunchkin\_63 Start: 53357, Stop: 53581, Start Num: 12

Candidate Starts for LittleMunchkin\_63:

(Start: 12 @53357 has 6 MA's), (18, 53456), (22, 53483), (27, 53531), (29, 53543), (31, 53570),

Gene: LizLemon\_64 Start: 55590, Stop: 55850, Start Num: 8

Candidate Starts for LizLemon\_64:

(Start: 8 @55590 has 27 MA's), (Start: 9 @55599 has 2 MA's), (15, 55644), (16, 55671), (17, 55698), (21, 55725), (26, 55767), (28, 55800), (29, 55809), (30, 55821),

Gene: Mariokart\_58 Start: 49462, Stop: 49695, Start Num: 7

Candidate Starts for Mariokart\_58:

(Start: 7 @49462 has 1 MA's), (Start: 12 @49498 has 6 MA's), (22, 49600), (29, 49660),

Gene: MasterPo\_65 Start: 55460, Stop: 55720, Start Num: 8

Candidate Starts for MasterPo\_65:

(Start: 8 @55460 has 27 MA's), (Start: 9 @55469 has 2 MA's), (15, 55514), (16, 55541), (17, 55568), (21, 55595), (26, 55637), (28, 55670), (29, 55679), (30, 55691),

Gene: Opia\_65 Start: 55480, Stop: 55740, Start Num: 8

Candidate Starts for Opia\_65:

(Start: 8 @55480 has 27 MA's), (Start: 9 @55489 has 2 MA's), (15, 55534), (16, 55561), (17, 55588), (21, 55615), (26, 55657), (28, 55690), (29, 55699), (30, 55711),

Gene: Qyrzula\_58 Start: 55591, Stop: 55851, Start Num: 8

Candidate Starts for Qyrzula\_58:

(Start: 8 @55591 has 27 MA's), (Start: 9 @55600 has 2 MA's), (15, 55645), (16, 55672), (17, 55699), (21, 55726), (26, 55768), (28, 55801), (29, 55810), (30, 55822),

Gene: Rhinoforte\_64 Start: 55513, Stop: 55773, Start Num: 8

Candidate Starts for Rhinoforte\_64:

(Start: 8 @55513 has 27 MA's), (Start: 9 @55522 has 2 MA's), (15, 55567), (16, 55594), (17, 55621), (21, 55648), (26, 55690), (28, 55723), (29, 55732), (30, 55744),

Gene: Rosebush\_63 Start: 55576, Stop: 55836, Start Num: 8

Candidate Starts for Rosebush\_63:

(Start: 8 @55576 has 27 MA's), (Start: 9 @55585 has 2 MA's), (15, 55630), (16, 55657), (17, 55684), (21, 55711), (26, 55753), (28, 55786), (29, 55795), (30, 55807),

Gene: Sabella\_64 Start: 55412, Stop: 55672, Start Num: 8

Candidate Starts for Sabella\_64:

(Start: 8 @55412 has 27 MA's), (Start: 9 @55421 has 2 MA's), (15, 55466), (16, 55493), (17, 55520), (21, 55547), (26, 55589), (28, 55622), (29, 55631), (30, 55643),

Gene: Sisko\_60 Start: 50847, Stop: 51044, Start Num: 12

Candidate Starts for Sisko\_60:

(Start: 12 @50847 has 6 MA's), (19, 50925), (22, 50946), (29, 51006), (31, 51033),

Gene: Sour\_62 Start: 53064, Stop: 53273, Start Num: 12

Candidate Starts for Sour\_62:

(Start: 7 @53028 has 1 MA's), (Start: 12 @53064 has 6 MA's), (19, 53154), (29, 53235), (31, 53262),

Gene: Tinciduntolum\_65 Start: 55579, Stop: 55839, Start Num: 8

Candidate Starts for Tinciduntolum\_65:

(Start: 8 @55579 has 27 MA's), (Start: 9 @55588 has 2 MA's), (15, 55633), (17, 55687), (21, 55714), (26, 55756), (28, 55789), (29, 55798), (30, 55810),

Gene: Tres\_64 Start: 55433, Stop: 55693, Start Num: 8

Candidate Starts for Tres\_64:

(Start: 8 @55433 has 27 MA's), (Start: 9 @55442 has 2 MA's), (15, 55487), (16, 55514), (17, 55541), (21, 55568), (26, 55610), (28, 55643), (29, 55652), (30, 55664),

Gene: West99\_64 Start: 55606, Stop: 55866, Start Num: 8

Candidate Starts for West99\_64:

(Start: 8 @55606 has 27 MA's), (Start: 9 @55615 has 2 MA's), (15, 55660), (16, 55687), (17, 55714), (21, 55741), (26, 55783), (28, 55816), (29, 55825), (30, 55837),

Gene: Yago84\_59 Start: 50332, Stop: 50529, Start Num: 12

Candidate Starts for Yago84\_59:

(Start: 12 @50332 has 6 MA's), (19, 50410), (22, 50431), (29, 50491), (31, 50518),