

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 162273 Report

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

Pham number 162273 has 15 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Kovu 26
- Track 2 : StarPlatinum 46
- Track 3: Alone3 216
- Track 4: Alone3 117
- Track 5 : Alone3 188
- Track 6 : NiceHouse\_61
- Track 7: Francesca 75
- Track 8 : Dorin 74
- Track 9 : Chidiebere 129
- Track 10 : ScarletRaider 127
- Track 11: Gray\_65, Kabocha\_66, Chidiebere\_65
- Track 12 : ChisanaKitsune\_61
- Track 13: Patbob 79

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

The start number called the most often in the published annotations is 11, it was called in 5 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Chidiebere\_129, Chidiebere\_65, ChisanaKitsune\_61, Gray\_65, Kabocha\_66,

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

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

• Alone3\_117, Alone3\_188, Alone3\_216, Dorin\_74, Francesca\_75, Kovu\_26, NiceHouse\_61, Patbob\_79, ScarletRaider\_127, StarPlatinum\_46,

# **Summary by start number:**

### Start 6:

- Found in 1 of 15 (6.7%) of genes in pham
- No Manual Annotations of this start.

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Patbob\_79 (FC),

## Start 9:

- Found in 1 of 15 (6.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kovu\_26 (AL),

# Start 10:

- Found in 1 of 15 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alone3\_117 (BS),

#### Start 11:

- Found in 5 of 15 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 5 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chidiebere\_129 (DQ), Chidiebere\_65 (DQ), ChisanaKitsune\_61 (DQ), Gray\_65 (DQ), Kabocha\_66 (DQ),

#### Start 12:

- Found in 2 of 15 (13.3%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ScarletRaider\_127 (DQ),

#### Start 13:

- Found in 3 of 15 (20.0%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alone3\_216 (BS), Dorin\_74 (CG), Francesca\_75 (CG),

### Start 14:

- Found in 2 of 15 (13.3%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Alone3\_188 (BS),

## Start 15:

- Found in 1 of 15 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NiceHouse\_61 (CE),

#### Start 16:

- Found in 2 of 15 (13.3%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: StarPlatinum\_46 (BE2),

# **Summary by clusters:**

There are 7 clusters represented in this pham: CG, AL, CE, FC, BS, BE2, DQ,

Info for manual annotations of cluster BE2:

•Start number 16 was manually annotated 1 time for cluster BE2.

Info for manual annotations of cluster BS:

- •Start number 10 was manually annotated 1 time for cluster BS.
- •Start number 13 was manually annotated 1 time for cluster BS.
- •Start number 14 was manually annotated 1 time for cluster BS.

Info for manual annotations of cluster CE:

•Start number 15 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster DQ:

•Start number 11 was manually annotated 5 times for cluster DQ.

#### Gene Information:

Gene: Alone3 216 Start: 111609, Stop: 111190, Start Num: 13

Candidate Starts for Alone 3216:

(Start: 13 @111609 has 1 MA's), (27, 111495), (33, 111435), (37, 111426), (49, 111309), (53, 111258),

Gene: Alone3\_117 Start: 62982, Stop: 63413, Start Num: 10

Candidate Starts for Alone 3117:

(Start: 10 @62982 has 1 MA's), (19, 63033), (22, 63066), (37, 63177), (55, 63345), (57, 63357),

Gene: Alone3 188 Start: 97401, Stop: 96985, Start Num: 14

Candidate Starts for Alone3\_188:

(Start: 14 @ 97401 has 1 MA's), (24, 97320), (32, 97230), (36, 97206), (50, 97071),

Gene: Chidiebere\_129 Start: 90897, Stop: 90346, Start Num: 11

Candidate Starts for Chidiebere 129:

(4, 91011), (Start: 11 @90897 has 5 MA's), (23, 90816), (26, 90801), (42, 90651), (52, 90525), (54, 90504), (55, 90501),

Gene: Chidiebere\_65 Start: 51821, Stop: 52273, Start Num: 11

Candidate Starts for Chidiebere\_65:

(Start: 11 @51821 has 5 MA's), (24, 51905), (27, 51938), (28, 51947), (29, 51965), (38, 52043), (41, 52064), (42, 52067), (47, 52118), (49, 52160), (52, 52193), (55, 52217),

Gene: ChisanaKitsune 61 Start: 50595, Stop: 51047, Start Num: 11

Candidate Starts for ChisanaKitsune 61:

(8, 50577), (Start: 11 @50595 has 5 MA's), (17, 50628), (24, 50679), (27, 50712), (28, 50721), (36, 50793), (38, 50817), (41, 50838), (42, 50841), (47, 50892), (48, 50925), (49, 50934), (52, 50967), (55, 50991),

Gene: Dorin\_74 Start: 59997, Stop: 60470, Start Num: 13

Candidate Starts for Dorin 74:

(Start: 13 @59997 has 1 MA's), (55, 60369),

Gene: Francesca\_75 Start: 60735, Stop: 61208, Start Num: 13

Candidate Starts for Francesca 75:

(Start: 13 @60735 has 1 MA's), (21, 60798), (55, 61107),

Gene: Gray\_65 Start: 51821, Stop: 52273, Start Num: 11

Candidate Starts for Gray 65:

(Start: 11 @51821 has 5 MA's), (24, 51905), (27, 51938), (28, 51947), (29, 51965), (38, 52043), (41, 52064), (42, 52067), (47, 52118), (49, 52160), (52, 52193), (55, 52217),

Gene: Kabocha\_66 Start: 52633, Stop: 53085, Start Num: 11

Candidate Starts for Kabocha\_66:

(Start: 11 @52633 has 5 MA's), (24, 52717), (27, 52750), (28, 52759), (29, 52777), (38, 52855), (41, 52876), (42, 52879), (47, 52930), (49, 52972), (52, 53005), (55, 53029),

Gene: Kovu\_26 Start: 17736, Stop: 17326, Start Num: 9

Candidate Starts for Kovu\_26:

(9, 17736), (12, 17733), (Start: 14 @ 17727 has 1 MA's), (Start: 16 @ 17721 has 1 MA's), (20, 17676), (21, 17667), (27, 17616), (30, 17574), (31, 17565), (40, 17520), (57, 17346),

Gene: NiceHouse\_61 Start: 34862, Stop: 35269, Start Num: 15

Candidate Starts for NiceHouse\_61:

(Start: 15 @34862 has 1 MA's), (23, 34934), (25, 34937), (37, 35027), (44, 35078), (56, 35207), (58, 35219),

Gene: Patbob\_79 Start: 44134, Stop: 43622, Start Num: 6

Candidate Starts for Patbob\_79:

(5, 44146), (6, 44134), (7, 44077), (35, 43855), (39, 43825), (46, 43765), (51, 43687), (55, 43657),

Gene: ScarletRaider 127 Start: 92635, Stop: 92135, Start Num: 12

Candidate Starts for ScarletRaider 127:

(1, 92797), (2, 92782), (3, 92761), (12, 92635), (18, 92593), (27, 92521), (42, 92434), (43, 92431), (45, 92404), (51, 92314), (60, 92245),

Gene: StarPlatinum\_46 Start: 22656, Stop: 23042, Start Num: 16

Candidate Starts for StarPlatinum\_46:

(Start: 16 @22656 has 1 MA's), (34, 22809), (47, 22911), (49, 22953), (52, 22986), (55, 23007), (59, 23031),