

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 5678 Report

This analysis was run 04/05/24 on database version 557.

Pham number 5678 has 11 members, 1 are drafts.

Phages represented in each track:

Track 1 : TP1604\_59, BabyGotBac\_60

Track 2 : Asis\_59, Maih\_58, BayC\_59, Salete\_59

Track 3 : Xkcd426\_60

Track 4 : RainyPolka\_57

Track 5: YDN12 58

• Track 6 : Mischief19 66

Track 7 : Abt2graduatex2 58

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

The start number called the most often in the published annotations is 4, it was called in 9 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 Abt2graduatex2\_58, Asis\_59, BabyGotBac\_60, BayC\_59, Maih\_58, Mischief19\_66, RainyPolka\_57, Salete\_59, TP1604\_59, YDN12\_58,

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

Genes that do not have the "Most Annotated" start: Xkcd426\_60,

### Summary by start number:

#### Start 4:

- Found in 10 of 11 (90.9%) of genes in pham
- Manual Annotations of this start: 9 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abt2graduatex2\_58 (BG), Asis\_59 (BG), BabyGotBac\_60 (BG), BayC\_59 (BG), Maih\_58 (BG), Mischief19\_66 (BG), RainyPolka\_57 (BG), Salete\_59 (BG), TP1604\_59 (BG), YDN12\_58 (BG),

#### Start 5:

- Found in 11 of 11 (100.0%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Xkcd426\_60 (BG),

## Summary by clusters:

There is one cluster represented in this pham: BG

Info for manual annotations of cluster BG:

- •Start number 4 was manually annotated 9 times for cluster BG.
- Start number 5 was manually annotated 1 time for cluster BG.

### Gene Information:

Gene: Abt2graduatex2\_58 Start: 48210, Stop: 48653, Start Num: 4

Candidate Starts for Abt2graduatex2\_58:

(Start: 4 @48210 has 9 MA's), (Start: 5 @48213 has 1 MA's), (6, 48222), (7, 48231), (8, 48258), (10, 48309), (11, 48339), (12, 48345), (13, 48381), (15, 48453), (17, 48546), (18, 48561), (19, 48579), (20, 48609), (22, 48645),

Gene: Asis\_59 Start: 48316, Stop: 48759, Start Num: 4

Candidate Starts for Asis 59:

(Start: 4 @ 48316 has 9 MA's), (Start: 5 @ 48319 has 1 MA's), (6, 48328), (7, 48337), (8, 48364), (10, 48415), (11, 48445), (12, 48451), (13, 48487), (15, 48559), (16, 48571), (17, 48652), (18, 48667), (19, 48685), (20, 48715), (22, 48751),

Gene: BabyGotBac\_60 Start: 48322, Stop: 48765, Start Num: 4

Candidate Starts for BabyGotBac 60:

(Start: 4 @48322 has 9 MA's), (Start: 5 @48325 has 1 MA's), (6, 48334), (7, 48343), (8, 48370), (10, 48421), (11, 48451), (12, 48457), (13, 48493), (15, 48565), (17, 48658), (18, 48673), (19, 48691), (20, 48721), (22, 48757),

Gene: BayC\_59 Start: 48320, Stop: 48763, Start Num: 4

Candidate Starts for BayC\_59:

(Start: 4 @48320 has 9 MA's), (Start: 5 @48323 has 1 MA's), (6, 48332), (7, 48341), (8, 48368), (10, 48419), (11, 48449), (12, 48455), (13, 48491), (15, 48563), (16, 48575), (17, 48656), (18, 48671), (19, 48689), (20, 48719), (22, 48755),

Gene: Maih\_58 Start: 48333, Stop: 48776, Start Num: 4

Candidate Starts for Maih 58:

(Start: 4 @48333 has 9 MA's), (Start: 5 @48336 has 1 MA's), (6, 48345), (7, 48354), (8, 48381), (10, 48432), (11, 48462), (12, 48468), (13, 48504), (15, 48576), (16, 48588), (17, 48669), (18, 48684), (19, 48702), (20, 48732), (22, 48768),

Gene: Mischief19 66 Start: 58505, Stop: 58957, Start Num: 4

Candidate Starts for Mischief19 66:

(1, 58283), (2, 58343), (3, 58394), (Start: 4 @58505 has 9 MA's), (Start: 5 @58508 has 1 MA's), (14, 58682), (21, 58937),

Gene: RainyPolka\_57 Start: 47593, Stop: 48036, Start Num: 4

Candidate Starts for RainyPolka\_57:

(Start: 4 @ 47593 has 9 MA's), (Start: 5 @ 47596 has 1 MA's), (6, 47605), (7, 47614), (8, 47641), (10, 47692), (11, 47722), (12, 47728), (13, 47764), (15, 47836), (17, 47929), (18, 47944), (20, 47992),

Gene: Salete\_59 Start: 48320, Stop: 48763, Start Num: 4

Candidate Starts for Salete 59:

(Start: 4 @48320 has 9 MA's), (Start: 5 @48323 has 1 MA's), (6, 48332), (7, 48341), (8, 48368), (10, 48419), (11, 48449), (12, 48455), (13, 48491), (15, 48563), (16, 48575), (17, 48656), (18, 48671), (19, 48689), (20, 48719), (22, 48755),

Gene: TP1604 59 Start: 48325, Stop: 48768, Start Num: 4

Candidate Starts for TP1604 59:

(Start: 4 @48325 has 9 MA's), (Start: 5 @48328 has 1 MA's), (6, 48337), (7, 48346), (8, 48373), (10, 48424), (11, 48454), (12, 48460), (13, 48496), (15, 48568), (17, 48661), (18, 48676), (19, 48694), (20, 48724), (22, 48760),

Gene: Xkcd426\_60 Start: 53472, Stop: 53909, Start Num: 5

Candidate Starts for Xkcd426\_60:

(Start: 5 @53472 has 1 MA's), (9, 53541), (10, 53565), (12, 53601), (13, 53637), (17, 53802), (18, 53817), (19, 53835), (20, 53865),

Gene: YDN12\_58 Start: 47161, Stop: 47598, Start Num: 4

Candidate Starts for YDN12 58:

(Start: 4 @ 47161 has 9 MA's), (Start: 5 @ 47164 has 1 MA's), (7, 47176), (8, 47203), (10, 47254), (11, 47284), (12, 47290), (13, 47326), (15, 47398), (16, 47410), (17, 47491), (18, 47506), (19, 47524), (20, 47554), (22, 47590),