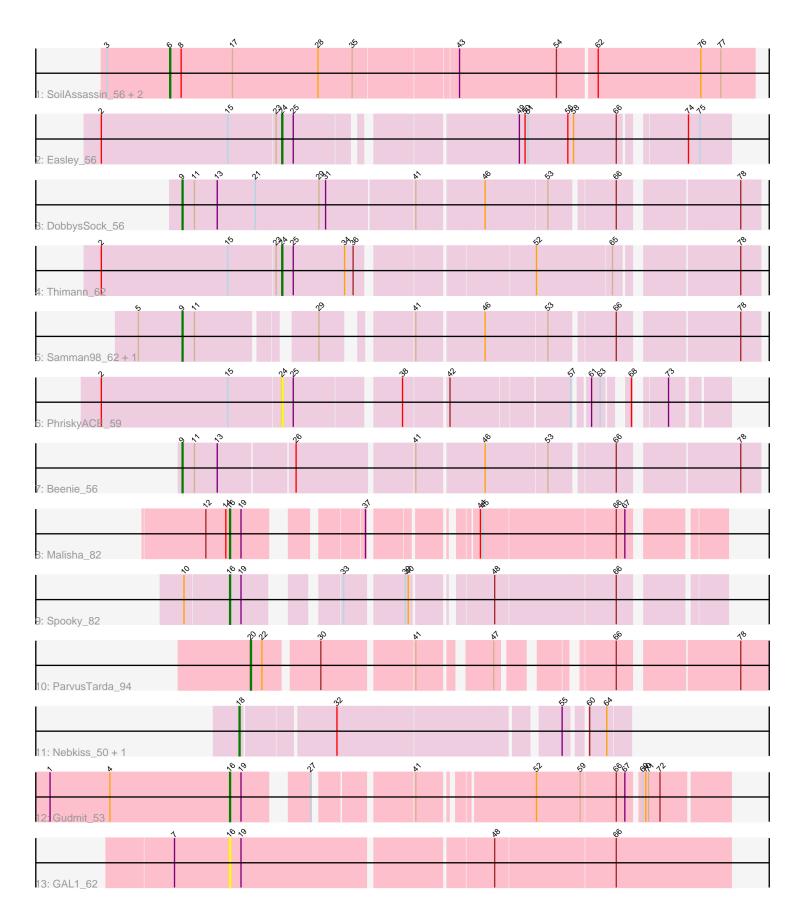
Pham 158222



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 158222 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158222 has 17 members, 2 are drafts.

Phages represented in each track:

- Track 1 : SoilAssassin\_56, Attis\_56, LordFarquaad\_58
- Track 2 : Easley\_56
- Track 3 : DobbysSock\_56
- Track 4 : Thimann 62
- Track 5 : Samman98 62, Clark 61
- Track 6 : PhriskyACE\_59
- Track 7 : Beenie 56
- Track 8 : Malisha 82
- Track 9 : Spooky\_82
  Track 10 : ParvusTarda\_94
- Track 11 : Nebkiss 50, Gaia 47
- Track 12 : Gudmit 53
- Track 13 : GAL1 62

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

The start number called the most often in the published annotations is 9, it was called in 4 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start: Beenie\_56, Clark\_61, DobbysSock\_56, Samman98\_62,

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

Genes that do not have the "Most Annotated" start: • Attis\_56, Easley\_56, GAL1\_62, Gaia\_47, Gudmit\_53, LordFarquaad\_58, Malisha\_82, Nebkiss\_50, ParvusTarda\_94, PhriskyACE\_59, SoilAssassin\_56, Spooky\_82, Thimann\_62,

# Summary by start number:

Start 6:

Found in 3 of 17 (17.6%) of genes in pham

- Manual Annotations of this start: 3 of 15
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Attis\_56 (CZ2), LordFarquaad\_58 (CZ2), SoilAssassin\_56 (CZ2),

#### Start 9:

- Found in 4 of 17 (23.5%) of genes in pham
- Manual Annotations of this start: 4 of 15
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Beenie\_56 (CZ4), Clark\_61 (CZ4), DobbysSock 56 (CZ4), Samman98 62 (CZ4),

### Start 16:

- Found in 4 of 17 (23.5%) of genes in pham
- Manual Annotations of this start: 3 of 15
- Called 100.0% of time when present

• Phage (with cluster) where this start called: GAL1\_62 (singleton), Gudmit\_53 (singleton), Malisha\_82 (DN), Spooky\_82 (DN2),

### Start 18:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia\_47 (X), Nebkiss\_50 (X),

### Start 20:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ParvusTarda\_94 (DV),

# Start 24:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Easley\_56 (CZ4), PhriskyACE\_59 (CZ4), Thimann 62 (CZ4),

# Summary by clusters:

There are 7 clusters represented in this pham: DN, singleton, CZ2, CZ4, DN2, DV, X,

Info for manual annotations of cluster CZ2: •Start number 6 was manually annotated 3 times for cluster CZ2.

Info for manual annotations of cluster CZ4:

•Start number 9 was manually annotated 4 times for cluster CZ4.

•Start number 24 was manually annotated 2 times for cluster CZ4.

Info for manual annotations of cluster DN: •Start number 16 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN2:

•Start number 16 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DV: •Start number 20 was manually annotated 1 time for cluster DV.

Info for manual annotations of cluster X: •Start number 18 was manually annotated 2 times for cluster X.

#### Gene Information:

Gene: Attis\_56 Start: 39408, Stop: 40010, Start Num: 6 Candidate Starts for Attis\_56: (3, 39342), (Start: 6 @39408 has 3 MA's), (8, 39420), (17, 39474), (28, 39564), (35, 39600), (43, 39705), (54, 39807), (62, 39846), (76, 39954), (77, 39975),

Gene: Beenie\_56 Start: 40503, Stop: 41057, Start Num: 9 Candidate Starts for Beenie\_56: (Start: 9 @40503 has 4 MA's), (11, 40515), (13, 40539), (26, 40614), (41, 40731), (46, 40797), (53, 40860), (66, 40923), (78, 41037),

Gene: Clark\_61 Start: 40299, Stop: 40820, Start Num: 9 Candidate Starts for Clark\_61: (5, 40254), (Start: 9 @40299 has 4 MA's), (11, 40311), (29, 40419), (41, 40494), (46, 40560), (53, 40623), (66, 40686), (78, 40800),

Gene: DobbysSock\_56 Start: 39905, Stop: 40468, Start Num: 9 Candidate Starts for DobbysSock\_56: (Start: 9 @39905 has 4 MA's), (11, 39917), (13, 39941), (21, 39980), (29, 40046), (31, 40052), (41, 40142), (46, 40208), (53, 40271), (66, 40334), (78, 40448),

Gene: Easley\_56 Start: 39021, Stop: 39443, Start Num: 24 Candidate Starts for Easley\_56: (2, 38835), (15, 38967), (23, 39015), (Start: 24 @39021 has 2 MA's), (25, 39033), (49, 39240), (50, 39246), (51, 39249), (56, 39291), (58, 39297), (66, 39342), (74, 39399), (75, 39411),

Gene: GAL1\_62 Start: 40466, Stop: 40969, Start Num: 16 Candidate Starts for GAL1\_62: (7, 40409), (Start: 16 @40466 has 3 MA's), (19, 40478), (48, 40727), (66, 40850),

Gene: Gaia\_47 Start: 36098, Stop: 35730, Start Num: 18 Candidate Starts for Gaia\_47: (Start: 18 @36098 has 2 MA's), (32, 36005), (55, 35789), (60, 35771), (64, 35753),

Gene: Gudmit\_53 Start: 33127, Stop: 33576, Start Num: 16 Candidate Starts for Gudmit\_53: (1, 32938), (4, 33001), (Start: 16 @33127 has 3 MA's), (19, 33139), (27, 33190), (41, 33280), (52, 33388), (59, 33433), (66, 33469), (67, 33478), (69, 33490), (70, 33493), (71, 33496), (72, 33508),

Gene: LordFarquaad\_58 Start: 39389, Stop: 39991, Start Num: 6 Candidate Starts for LordFarquaad\_58: (3, 39323), (Start: 6 @39389 has 3 MA's), (8, 39401), (17, 39455), (28, 39545), (35, 39581), (43, 39686), (54, 39788), (62, 39827), (76, 39935), (77, 39956),

Gene: Malisha\_82 Start: 49477, Stop: 49902, Start Num: 16 Candidate Starts for Malisha\_82: (12, 49453), (14, 49474), (Start: 16 @49477 has 3 MA's), (19, 49489), (37, 49585), (44, 49669), (45, 49672), (66, 49807), (67, 49816),

Gene: Nebkiss\_50 Start: 35799, Stop: 35431, Start Num: 18 Candidate Starts for Nebkiss\_50: (Start: 18 @35799 has 2 MA's), (32, 35706), (55, 35490), (60, 35472), (64, 35454),

Gene: ParvusTarda\_94 Start: 64352, Stop: 64807, Start Num: 20 Candidate Starts for ParvusTarda\_94: (Start: 20 @64352 has 1 MA's), (22, 64364), (30, 64415), (41, 64505), (47, 64568), (66, 64661), (78, 64775),

Gene: PhriskyACE\_59 Start: 40589, Stop: 40981, Start Num: 24 Candidate Starts for PhriskyACE\_59: (2, 40403), (15, 40535), (Start: 24 @40589 has 2 MA's), (25, 40601), (38, 40703), (42, 40745), (57, 40862), (61, 40874), (63, 40883), (68, 40901), (73, 40925),

Gene: Samman98\_62 Start: 40402, Stop: 40923, Start Num: 9 Candidate Starts for Samman98\_62: (5, 40357), (Start: 9 @40402 has 4 MA's), (11, 40414), (29, 40522), (41, 40597), (46, 40663), (53, 40726), (66, 40789), (78, 40903),

Gene: SoilAssassin\_56 Start: 39407, Stop: 40009, Start Num: 6 Candidate Starts for SoilAssassin\_56: (3, 39341), (Start: 6 @ 39407 has 3 MA's), (8, 39419), (17, 39473), (28, 39563), (35, 39599), (43, 39704), (54, 39806), (62, 39845), (76, 39953), (77, 39974),

Gene: Spooky\_82 Start: 46716, Stop: 47147, Start Num: 16 Candidate Starts for Spooky\_82: (10, 46671), (Start: 16 @46716 has 3 MA's), (19, 46728), (33, 46800), (39, 46857), (40, 46860), (48, 46929), (66, 47052),

Gene: Thimann\_62 Start: 40740, Stop: 41195, Start Num: 24 Candidate Starts for Thimann\_62: (2, 40554), (15, 40686), (23, 40734), (Start: 24 @40740 has 2 MA's), (25, 40752), (34, 40806), (36, 40815), (52, 40983), (65, 41061), (78, 41175),