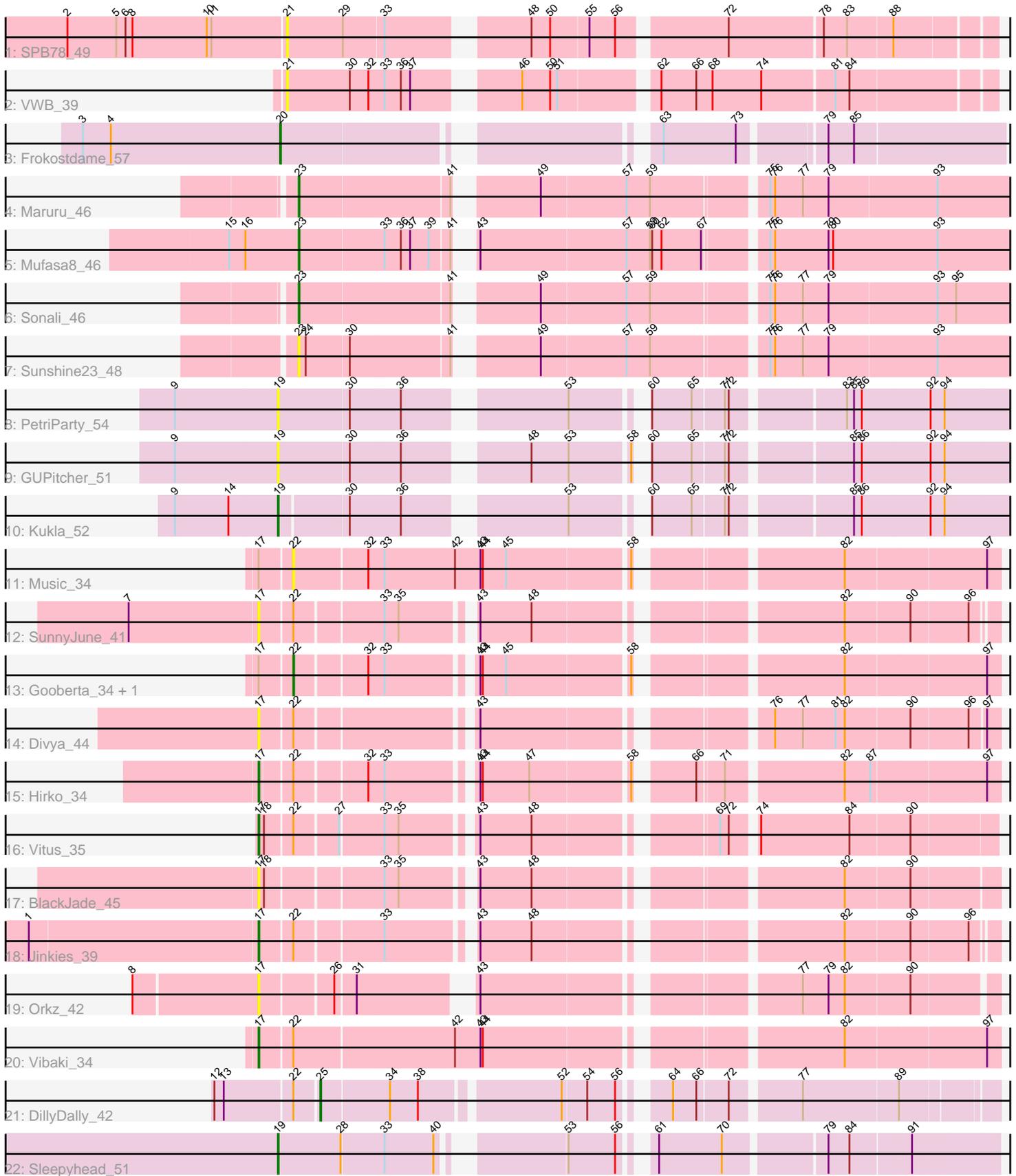


Pham 289721



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 289721 Report

This analysis was run 03/28/26 on database version 641.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 289721 has 23 members, 11 are drafts.

Phages represented in each track:

- Track 1 : SPB78_49
- Track 2 : VWB_39
- Track 3 : Frokostdame_57
- Track 4 : Maruru_46
- Track 5 : Mufasa8_46
- Track 6 : Sonali_46
- Track 7 : Sunshine23_48
- Track 8 : PetriParty_54
- Track 9 : GUPitcher_51
- Track 10 : Kukla_52
- Track 11 : Music_34
- Track 12 : SunnyJune_41
- Track 13 : Gooberta_34, GoldDust_34
- Track 14 : Divya_44
- Track 15 : Hirko_34
- Track 16 : Vitus_35
- Track 17 : BlackJade_45
- Track 18 : Jinkies_39
- Track 19 : Orkz_42
- Track 20 : Vibaki_34
- Track 21 : DillyDally_42
- Track 22 : Sleepyhead_51

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

The start number called the most often in the published annotations is 17, it was called in 4 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlackJade_45, Divya_44, Hirko_34, Jinkies_39, Orkz_42, SunnyJune_41, Vibaki_34, Vitus_35,

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

- GoldDust_34, Gooberta_34, Music_34,

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

- DillyDally_42, Frokostdame_57, GUPitcher_51, Kukla_52, Maruru_46, Mufasa8_46, PetriParty_54, SPB78_49, Sleepyhead_51, Sonali_46, Sunshine23_48, VWB_39,

Summary by start number:

Start 17:

- Found in 11 of 23 (47.8%) of genes in pham
- Manual Annotations of this start: 4 of 12
- Called 72.7% of time when present
- Phage (with cluster) where this start called: BlackJade_45 (FL), Divya_44 (FL), Hirko_34 (FL), Jinkies_39 (FL), Orkz_42 (FL), SunnyJune_41 (FL), Vibaki_34 (FL), Vitus_35 (FL),

Start 19:

- Found in 4 of 23 (17.4%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GUPitcher_51 (FJ), Kukla_52 (FJ), PetriParty_54 (FJ), Sleepyhead_51 (singleton),

Start 20:

- Found in 1 of 23 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Frokostdame_57 (CV),

Start 21:

- Found in 2 of 23 (8.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SPB78_49 (BA), VWB_39 (BA),

Start 22:

- Found in 10 of 23 (43.5%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 30.0% of time when present
- Phage (with cluster) where this start called: GoldDust_34 (FL), Gooberta_34 (FL), Music_34 (FL),

Start 23:

- Found in 4 of 23 (17.4%) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Maruru_46 (FG), Mufasa8_46 (FG), Sonali_46 (FG), Sunshine23_48 (FG),

Start 25:

- Found in 1 of 23 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DillyDally_42 (singleton),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, BA, FG, FJ, FL, CV,

Info for manual annotations of cluster CV:

- Start number 20 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster FG:

- Start number 23 was manually annotated 3 times for cluster FG.

Info for manual annotations of cluster FJ:

- Start number 19 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FL:

- Start number 17 was manually annotated 4 times for cluster FL.
- Start number 22 was manually annotated 1 time for cluster FL.

Gene Information:

Gene: BlackJade_45 Start: 31005, Stop: 31841, Start Num: 17

Candidate Starts for BlackJade_45:

(Start: 17 @31005 has 4 MA's), (18, 31011), (33, 31146), (35, 31164), (43, 31242), (48, 31308), (82, 31653), (90, 31734),

Gene: DillyDally_42 Start: 27875, Stop: 28651, Start Num: 25

Candidate Starts for DillyDally_42:

(12, 27755), (13, 27767), (Start: 22 @27848 has 1 MA's), (Start: 25 @27875 has 1 MA's), (34, 27959), (38, 27995), (52, 28160), (54, 28190), (56, 28226), (64, 28268), (66, 28298), (72, 28334), (77, 28415), (89, 28535),

Gene: Divya_44 Start: 31105, Stop: 31944, Start Num: 17

Candidate Starts for Divya_44:

(Start: 17 @31105 has 4 MA's), (Start: 22 @31144 has 1 MA's), (43, 31345), (76, 31666), (77, 31702), (81, 31744), (82, 31756), (90, 31837), (96, 31909), (97, 31927),

Gene: Frokostdame_57 Start: 38508, Stop: 39326, Start Num: 20

Candidate Starts for Frokostdame_57:

(3, 38253), (4, 38289), (Start: 20 @38508 has 1 MA's), (63, 38919), (73, 39009), (79, 39108), (85, 39141),

Gene: GUPitcher_51 Start: 33598, Stop: 34449, Start Num: 19

Candidate Starts for GUPitcher_51:

(9, 33466), (Start: 19 @33598 has 2 MA's), (30, 33688), (36, 33751), (48, 33883), (53, 33931), (58, 34003), (60, 34006), (65, 34057), (71, 34096), (72, 34099), (85, 34240), (86, 34249), (92, 34333), (94,

34351),

Gene: GoldDust_34 Start: 30378, Stop: 31184, Start Num: 22

Candidate Starts for GoldDust_34:

(Start: 17 @30339 has 4 MA's), (Start: 22 @30378 has 1 MA's), (32, 30462), (33, 30480), (43, 30579), (44, 30582), (45, 30612), (58, 30762), (82, 30990), (97, 31167),

Gene: Gooberta_34 Start: 30377, Stop: 31183, Start Num: 22

Candidate Starts for Gooberta_34:

(Start: 17 @30338 has 4 MA's), (Start: 22 @30377 has 1 MA's), (32, 30461), (33, 30479), (43, 30578), (44, 30581), (45, 30611), (58, 30761), (82, 30989), (97, 31166),

Gene: Hirko_34 Start: 30103, Stop: 30942, Start Num: 17

Candidate Starts for Hirko_34:

(Start: 17 @30103 has 4 MA's), (Start: 22 @30139 has 1 MA's), (32, 30223), (33, 30241), (43, 30340), (44, 30343), (47, 30403), (58, 30523), (66, 30583), (71, 30613), (82, 30751), (87, 30784), (97, 30925),

Gene: Jinkies_39 Start: 31061, Stop: 31891, Start Num: 17

Candidate Starts for Jinkies_39:

(1, 30770), (Start: 17 @31061 has 4 MA's), (Start: 22 @31100 has 1 MA's), (33, 31202), (43, 31298), (48, 31364), (82, 31709), (90, 31790), (96, 31862),

Gene: Kukla_52 Start: 32835, Stop: 33680, Start Num: 19

Candidate Starts for Kukla_52:

(9, 32703), (14, 32772), (Start: 19 @32835 has 2 MA's), (30, 32919), (36, 32982), (53, 33162), (60, 33237), (65, 33288), (71, 33327), (72, 33330), (85, 33471), (86, 33480), (92, 33564), (94, 33582),

Gene: Maruru_46 Start: 36167, Stop: 37042, Start Num: 23

Candidate Starts for Maruru_46:

(Start: 23 @36167 has 3 MA's), (41, 36353), (49, 36437), (57, 36545), (59, 36575), (75, 36707), (76, 36713), (77, 36749), (79, 36782), (93, 36920),

Gene: Mufasa8_46 Start: 34303, Stop: 35181, Start Num: 23

Candidate Starts for Mufasa8_46:

(15, 34213), (16, 34234), (Start: 23 @34303 has 3 MA's), (33, 34408), (36, 34429), (37, 34441), (39, 34465), (41, 34489), (43, 34495), (57, 34681), (59, 34711), (60, 34714), (62, 34726), (67, 34777), (75, 34843), (76, 34849), (79, 34918), (80, 34924), (93, 35059),

Gene: Music_34 Start: 30228, Stop: 31064, Start Num: 22

Candidate Starts for Music_34:

(Start: 17 @30189 has 4 MA's), (Start: 22 @30228 has 1 MA's), (32, 30318), (33, 30336), (42, 30426), (43, 30459), (44, 30462), (45, 30492), (58, 30642), (82, 30870), (97, 31047),

Gene: Orkz_42 Start: 29227, Stop: 30048, Start Num: 17

Candidate Starts for Orkz_42:

(8, 29071), (Start: 17 @29227 has 4 MA's), (26, 29311), (31, 29335), (43, 29455), (77, 29812), (79, 29845), (82, 29866), (90, 29947),

Gene: PetriParty_54 Start: 33073, Stop: 33924, Start Num: 19

Candidate Starts for PetriParty_54:

(9, 32941), (Start: 19 @33073 has 2 MA's), (30, 33163), (36, 33226), (53, 33406), (60, 33481), (65, 33532), (71, 33571), (72, 33574), (83, 33706), (85, 33715), (86, 33724), (92, 33808), (94, 33826),

Gene: SPB78_49 Start: 33944, Stop: 34774, Start Num: 21

Candidate Starts for SPB78_49:

(2, 33665), (5, 33728), (6, 33740), (8, 33749), (10, 33845), (11, 33851), (21, 33944), (29, 34016), (33, 34067), (48, 34220), (50, 34244), (55, 34292), (56, 34325), (72, 34451), (78, 34568), (83, 34598), (88, 34655),

Gene: Sleepyhead_51 Start: 34354, Stop: 35169, Start Num: 19

Candidate Starts for Sleepyhead_51:

(Start: 19 @34354 has 2 MA's), (28, 34435), (33, 34486), (40, 34549), (53, 34675), (56, 34735), (61, 34759), (70, 34840), (79, 34960), (84, 34987), (91, 35062),

Gene: Sonali_46 Start: 36630, Stop: 37502, Start Num: 23

Candidate Starts for Sonali_46:

(Start: 23 @36630 has 3 MA's), (41, 36816), (49, 36900), (57, 37008), (59, 37038), (75, 37170), (76, 37176), (77, 37212), (79, 37245), (93, 37383), (95, 37407),

Gene: SunnyJune_41 Start: 30629, Stop: 31459, Start Num: 17

Candidate Starts for SunnyJune_41:

(7, 30464), (Start: 17 @30629 has 4 MA's), (Start: 22 @30668 has 1 MA's), (33, 30770), (35, 30788), (43, 30866), (48, 30932), (82, 31277), (90, 31358), (96, 31430),

Gene: Sunshine23_48 Start: 36509, Stop: 37384, Start Num: 23

Candidate Starts for Sunshine23_48:

(Start: 23 @36509 has 3 MA's), (24, 36518), (30, 36572), (41, 36695), (49, 36779), (57, 36887), (59, 36917), (75, 37049), (76, 37055), (77, 37091), (79, 37124), (93, 37262),

Gene: VWB_39 Start: 31399, Stop: 32235, Start Num: 21

Candidate Starts for VWB_39:

(21, 31399), (30, 31480), (32, 31504), (33, 31525), (36, 31546), (37, 31558), (46, 31666), (50, 31702), (51, 31711), (62, 31822), (66, 31867), (68, 31888), (74, 31951), (81, 32041), (84, 32059),

Gene: Vibaki_34 Start: 30213, Stop: 31088, Start Num: 17

Candidate Starts for Vibaki_34:

(Start: 17 @30213 has 4 MA's), (Start: 22 @30252 has 1 MA's), (42, 30450), (43, 30483), (44, 30486), (82, 30894), (97, 31071),

Gene: Vitus_35 Start: 28962, Stop: 29801, Start Num: 17

Candidate Starts for Vitus_35:

(Start: 17 @28962 has 4 MA's), (18, 28968), (Start: 22 @29001 has 1 MA's), (27, 29052), (33, 29103), (35, 29121), (43, 29202), (48, 29268), (69, 29469), (72, 29478), (74, 29505), (84, 29619), (90, 29694),