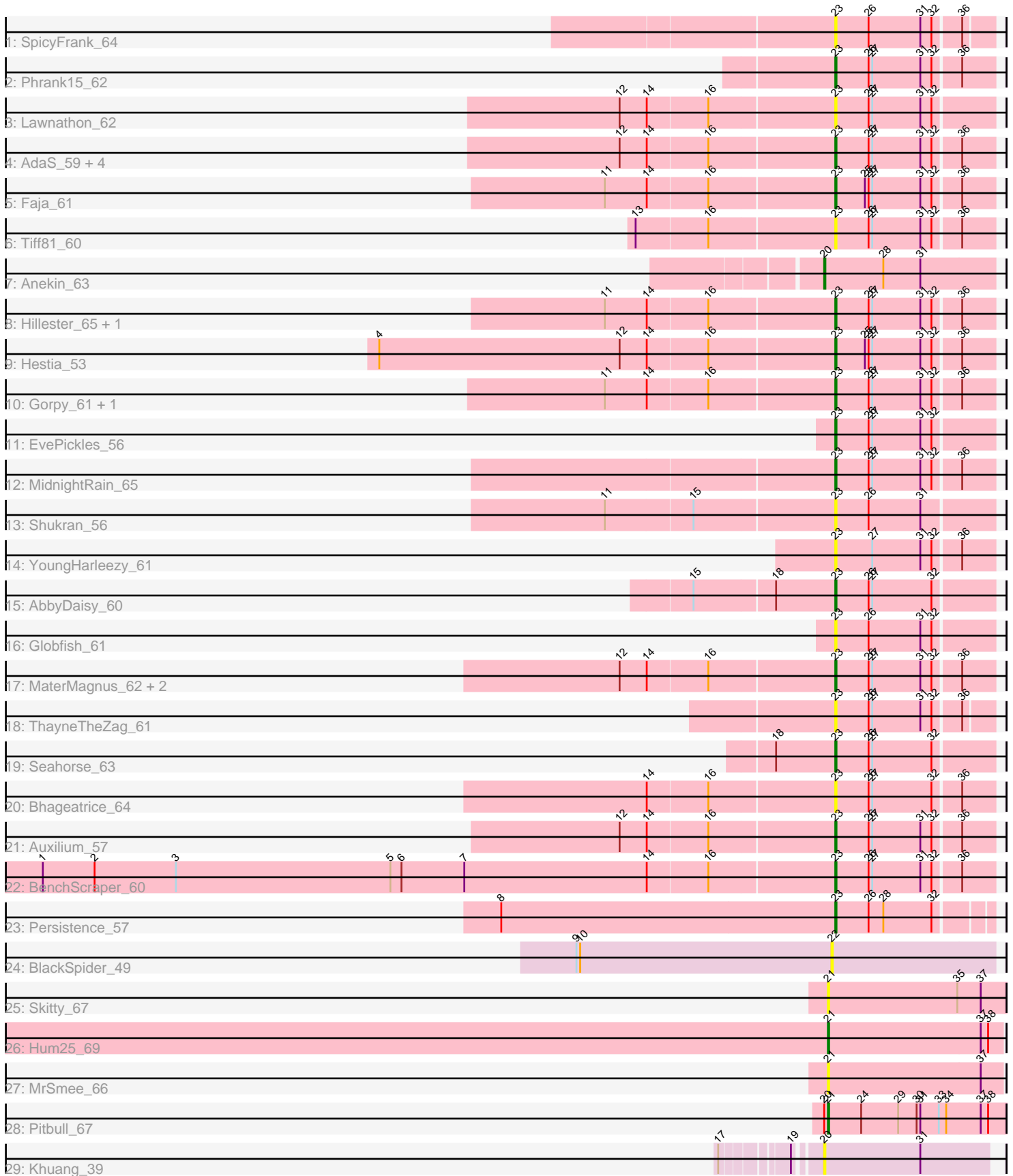


Pham 203130



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 203130 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203130 has 37 members, 18 are drafts.

Phages represented in each track:

- Track 1 : SpicyFrank\_64
- Track 2 : Phrank15\_62
- Track 3 : Lawnathon\_62
- Track 4 : AdaS\_59, CookieBear\_61, BlueShadow\_62, Isolde\_60, BillyTP\_63
- Track 5 : Faja\_61
- Track 6 : Tiff81\_60
- Track 7 : Anekin\_63
- Track 8 : Hillester\_65, RadFad\_65
- Track 9 : Hestia\_53
- Track 10 : Gorpy\_61, Sakai\_60
- Track 11 : EvePickles\_56
- Track 12 : MidnightRain\_65
- Track 13 : Shukran\_56
- Track 14 : YoungHarleezy\_61
- Track 15 : AbbyDaisy\_60
- Track 16 : Globfish\_61
- Track 17 : MaterMagnus\_62, Raphaella\_60, Aikyam\_60
- Track 18 : ThayneTheZag\_61
- Track 19 : Seahorse\_63
- Track 20 : Bhageatrice\_64
- Track 21 : Auxilium\_57
- Track 22 : BenchScraper\_60
- Track 23 : Persistence\_57
- Track 24 : BlackSpider\_49
- Track 25 : Skitty\_67
- Track 26 : Hum25\_69
- Track 27 : MrSmee\_66
- Track 28 : Pitbull\_67
- Track 29 : Khuang\_39

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

The start number called the most often in the published annotations is 23, it was called in 16 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbyDaisy\_60, AdaS\_59, Aikyam\_60, Auxilium\_57, BenchScraper\_60, Bhageatrice\_64, BillyTP\_63, BlueShadow\_62, CookieBear\_61, EvePickles\_56, Faja\_61, Globfish\_61, Gorpy\_61, Hestia\_53, Hillester\_65, Isolde\_60, Lawnathon\_62, MaterMagnus\_62, MidnightRain\_65, Persistence\_57, Phrank15\_62, RadFad\_65, Raphaella\_60, Sakai\_60, Seahorse\_63, Shukran\_56, SpicyFrank\_64, ThayneTheZag\_61, Tiff81\_60, YoungHarleezy\_61,

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

- 

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

- Anekin\_63, BlackSpider\_49, Hum25\_69, Khuang\_39, MrSmee\_66, Pitbull\_67, Skitty\_67,

### Summary by start number:

Start 20:

- Found in 3 of 37 ( 8.1% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Anekin\_63 (AY), Khuang\_39 (FS),

Start 21:

- Found in 4 of 37 ( 10.8% ) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hum25\_69 (FQ), MrSmee\_66 (FQ), Pitbull\_67 (FQ), Skitty\_67 (FQ),

Start 22:

- Found in 1 of 37 ( 2.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlackSpider\_49 (FN),

Start 23:

- Found in 30 of 37 ( 81.1% ) of genes in pham
- Manual Annotations of this start: 16 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_60 (AY), AdaS\_59 (AY), Aikyam\_60 (AY), Auxilium\_57 (AY), BenchScraper\_60 (AY), Bhageatrice\_64 (AY), BillyTP\_63 (AY), BlueShadow\_62 (AY), CookieBear\_61 (AY), EvePickles\_56 (AY), Faja\_61 (AY), Globfish\_61 (AY), Gorpy\_61 (AY), Hestia\_53 (AY), Hillester\_65 (AY), Isolde\_60 (AY), Lawnathon\_62 (AY), MaterMagnus\_62 (AY), MidnightRain\_65 (AY), Persistence\_57 (AY), Phrank15\_62 (AY), RadFad\_65 (AY), Raphaella\_60 (AY), Sakai\_60 (AY), Seahorse\_63 (AY), Shukran\_56 (AY), SpicyFrank\_64 (AY), ThayneTheZag\_61 (AY), Tiff81\_60 (AY), YoungHarleezy\_61 (AY),

### Summary by clusters:

There are 4 clusters represented in this pham: AY, FQ, FS, FN,

Info for manual annotations of cluster AY:

- Start number 20 was manually annotated 1 time for cluster AY.
- Start number 23 was manually annotated 16 times for cluster AY.

Info for manual annotations of cluster FQ:

- Start number 21 was manually annotated 2 times for cluster FQ.

### ***Gene Information:***

Gene: AbbyDaisy\_60 Start: 34539, Stop: 34664, Start Num: 23

Candidate Starts for AbbyDaisy\_60:

(15, 34428), (18, 34491), (Start: 23 @34539 has 16 MA's), (26, 34566), (27, 34569), (32, 34617),

Gene: AdaS\_59 Start: 32356, Stop: 32481, Start Num: 23

Candidate Starts for AdaS\_59:

(12, 32188), (14, 32209), (16, 32257), (Start: 23 @32356 has 16 MA's), (26, 32383), (27, 32386), (31, 32425), (32, 32434), (36, 32455),

Gene: Aikyam\_60 Start: 32675, Stop: 32800, Start Num: 23

Candidate Starts for Aikyam\_60:

(12, 32507), (14, 32528), (16, 32576), (Start: 23 @32675 has 16 MA's), (26, 32702), (27, 32705), (31, 32744), (32, 32753), (36, 32774),

Gene: Anekin\_63 Start: 34902, Stop: 35039, Start Num: 20

Candidate Starts for Anekin\_63:

(Start: 20 @34902 has 1 MA's), (28, 34950), (31, 34980),

Gene: Auxilium\_57 Start: 31829, Stop: 31954, Start Num: 23

Candidate Starts for Auxilium\_57:

(12, 31661), (14, 31682), (16, 31730), (Start: 23 @31829 has 16 MA's), (26, 31856), (27, 31859), (31, 31898), (32, 31907), (36, 31928),

Gene: BenchScraper\_60 Start: 33867, Stop: 33992, Start Num: 23

Candidate Starts for BenchScraper\_60:

(1, 33231), (2, 33273), (3, 33339), (5, 33513), (6, 33522), (7, 33573), (14, 33720), (16, 33768), (Start: 23 @33867 has 16 MA's), (26, 33894), (27, 33897), (31, 33936), (32, 33945), (36, 33966),

Gene: Bhageatrice\_64 Start: 36379, Stop: 36504, Start Num: 23

Candidate Starts for Bhageatrice\_64:

(14, 36232), (16, 36280), (Start: 23 @36379 has 16 MA's), (26, 36406), (27, 36409), (32, 36457), (36, 36478),

Gene: BillyTP\_63 Start: 35722, Stop: 35847, Start Num: 23

Candidate Starts for BillyTP\_63:

(12, 35554), (14, 35575), (16, 35623), (Start: 23 @35722 has 16 MA's), (26, 35749), (27, 35752), (31, 35791), (32, 35800), (36, 35821),

Gene: BlackSpider\_49 Start: 31161, Stop: 31292, Start Num: 22

Candidate Starts for BlackSpider\_49:

(9, 30954), (10, 30957), (22, 31161),

Gene: BlueShadow\_62 Start: 34512, Stop: 34637, Start Num: 23

Candidate Starts for BlueShadow\_62:

(12, 34344), (14, 34365), (16, 34413), (Start: 23 @34512 has 16 MA's), (26, 34539), (27, 34542), (31, 34581), (32, 34590), (36, 34611),

Gene: CookieBear\_61 Start: 34106, Stop: 34231, Start Num: 23

Candidate Starts for CookieBear\_61:

(12, 33938), (14, 33959), (16, 34007), (Start: 23 @34106 has 16 MA's), (26, 34133), (27, 34136), (31, 34175), (32, 34184), (36, 34205),

Gene: EvePickles\_56 Start: 34096, Stop: 34221, Start Num: 23

Candidate Starts for EvePickles\_56:

(Start: 23 @34096 has 16 MA's), (26, 34123), (27, 34126), (31, 34165), (32, 34174),

Gene: Faja\_61 Start: 35481, Stop: 35606, Start Num: 23

Candidate Starts for Faja\_61:

(11, 35301), (14, 35334), (16, 35382), (Start: 23 @35481 has 16 MA's), (25, 35505), (26, 35508), (27, 35511), (31, 35550), (32, 35559), (36, 35580),

Gene: Globfish\_61 Start: 34535, Stop: 34660, Start Num: 23

Candidate Starts for Globfish\_61:

(Start: 23 @34535 has 16 MA's), (26, 34562), (31, 34604), (32, 34613),

Gene: Gorpy\_61 Start: 35098, Stop: 35223, Start Num: 23

Candidate Starts for Gorpy\_61:

(11, 34918), (14, 34951), (16, 34999), (Start: 23 @35098 has 16 MA's), (26, 35125), (27, 35128), (31, 35167), (32, 35176), (36, 35197),

Gene: Hestia\_53 Start: 31665, Stop: 31790, Start Num: 23

Candidate Starts for Hestia\_53:

(4, 31302), (12, 31497), (14, 31518), (16, 31566), (Start: 23 @31665 has 16 MA's), (25, 31689), (26, 31692), (27, 31695), (31, 31734), (32, 31743), (36, 31764),

Gene: Hillester\_65 Start: 35445, Stop: 35570, Start Num: 23

Candidate Starts for Hillester\_65:

(11, 35265), (14, 35298), (16, 35346), (Start: 23 @35445 has 16 MA's), (26, 35472), (27, 35475), (31, 35514), (32, 35523), (36, 35544),

Gene: Hum25\_69 Start: 37651, Stop: 37791, Start Num: 21

Candidate Starts for Hum25\_69:

(Start: 21 @37651 has 2 MA's), (37, 37774), (38, 37780),

Gene: Isolde\_60 Start: 33775, Stop: 33900, Start Num: 23

Candidate Starts for Isolde\_60:

(12, 33607), (14, 33628), (16, 33676), (Start: 23 @33775 has 16 MA's), (26, 33802), (27, 33805), (31, 33844), (32, 33853), (36, 33874),

Gene: Khuang\_39 Start: 25888, Stop: 25757, Start Num: 20

Candidate Starts for Khuang\_39:

(17, 25951), (19, 25906), (Start: 20 @25888 has 1 MA's), (31, 25810),

Gene: Lawnathon\_62 Start: 34267, Stop: 34392, Start Num: 23  
Candidate Starts for Lawnathon\_62:  
(12, 34099), (14, 34120), (16, 34168), (Start: 23 @34267 has 16 MA's), (26, 34294), (27, 34297), (31, 34336), (32, 34345),

Gene: MaterMagnus\_62 Start: 34847, Stop: 34972, Start Num: 23  
Candidate Starts for MaterMagnus\_62:  
(12, 34679), (14, 34700), (16, 34748), (Start: 23 @34847 has 16 MA's), (26, 34874), (27, 34877), (31, 34916), (32, 34925), (36, 34946),

Gene: MidnightRain\_65 Start: 35616, Stop: 35741, Start Num: 23  
Candidate Starts for MidnightRain\_65:  
(Start: 23 @35616 has 16 MA's), (26, 35643), (27, 35646), (31, 35685), (32, 35694), (36, 35715),

Gene: MrSmee\_66 Start: 37015, Stop: 37155, Start Num: 21  
Candidate Starts for MrSmee\_66:  
(Start: 21 @37015 has 2 MA's), (37, 37138),

Gene: Persistence\_57 Start: 33216, Stop: 33335, Start Num: 23  
Candidate Starts for Persistence\_57:  
(8, 32946), (Start: 23 @33216 has 16 MA's), (26, 33243), (28, 33255), (32, 33294),

Gene: Phrank15\_62 Start: 34398, Stop: 34523, Start Num: 23  
Candidate Starts for Phrank15\_62:  
(Start: 23 @34398 has 16 MA's), (26, 34425), (27, 34428), (31, 34467), (32, 34476), (36, 34497),

Gene: Pitbull\_67 Start: 37117, Stop: 37260, Start Num: 21  
Candidate Starts for Pitbull\_67:  
(Start: 20 @37114 has 1 MA's), (Start: 21 @37117 has 2 MA's), (24, 37144), (29, 37174), (30, 37189), (31, 37192), (33, 37207), (34, 37213), (37, 37240), (38, 37246),

Gene: RadFad\_65 Start: 35445, Stop: 35570, Start Num: 23  
Candidate Starts for RadFad\_65:  
(11, 35265), (14, 35298), (16, 35346), (Start: 23 @35445 has 16 MA's), (26, 35472), (27, 35475), (31, 35514), (32, 35523), (36, 35544),

Gene: Raphaella\_60 Start: 33965, Stop: 34090, Start Num: 23  
Candidate Starts for Raphaella\_60:  
(12, 33797), (14, 33818), (16, 33866), (Start: 23 @33965 has 16 MA's), (26, 33992), (27, 33995), (31, 34034), (32, 34043), (36, 34064),

Gene: Sakai\_60 Start: 33809, Stop: 33934, Start Num: 23  
Candidate Starts for Sakai\_60:  
(11, 33629), (14, 33662), (16, 33710), (Start: 23 @33809 has 16 MA's), (26, 33836), (27, 33839), (31, 33878), (32, 33887), (36, 33908),

Gene: Seahorse\_63 Start: 35952, Stop: 36077, Start Num: 23  
Candidate Starts for Seahorse\_63:  
(18, 35904), (Start: 23 @35952 has 16 MA's), (26, 35979), (27, 35982), (32, 36030),

Gene: Shukran\_56 Start: 32442, Stop: 32567, Start Num: 23  
Candidate Starts for Shukran\_56:

(11, 32262), (15, 32331), (Start: 23 @32442 has 16 MA's), (26, 32469), (31, 32511),

Gene: Skitty\_67 Start: 35254, Stop: 35397, Start Num: 21

Candidate Starts for Skitty\_67:

(Start: 21 @35254 has 2 MA's), (35, 35359), (37, 35377),

Gene: SpicyFrank\_64 Start: 35216, Stop: 35338, Start Num: 23

Candidate Starts for SpicyFrank\_64:

(Start: 23 @35216 has 16 MA's), (26, 35243), (31, 35285), (32, 35294), (36, 35315),

Gene: ThayneTheZag\_61 Start: 33668, Stop: 33790, Start Num: 23

Candidate Starts for ThayneTheZag\_61:

(Start: 23 @33668 has 16 MA's), (26, 33695), (27, 33698), (31, 33737), (32, 33746), (36, 33767),

Gene: Tiff81\_60 Start: 32012, Stop: 32137, Start Num: 23

Candidate Starts for Tiff81\_60:

(13, 31856), (16, 31913), (Start: 23 @32012 has 16 MA's), (26, 32039), (27, 32042), (31, 32081), (32, 32090), (36, 32111),

Gene: YoungHarleezy\_61 Start: 34504, Stop: 34629, Start Num: 23

Candidate Starts for YoungHarleezy\_61:

(Start: 23 @34504 has 16 MA's), (27, 34534), (31, 34573), (32, 34582), (36, 34603),