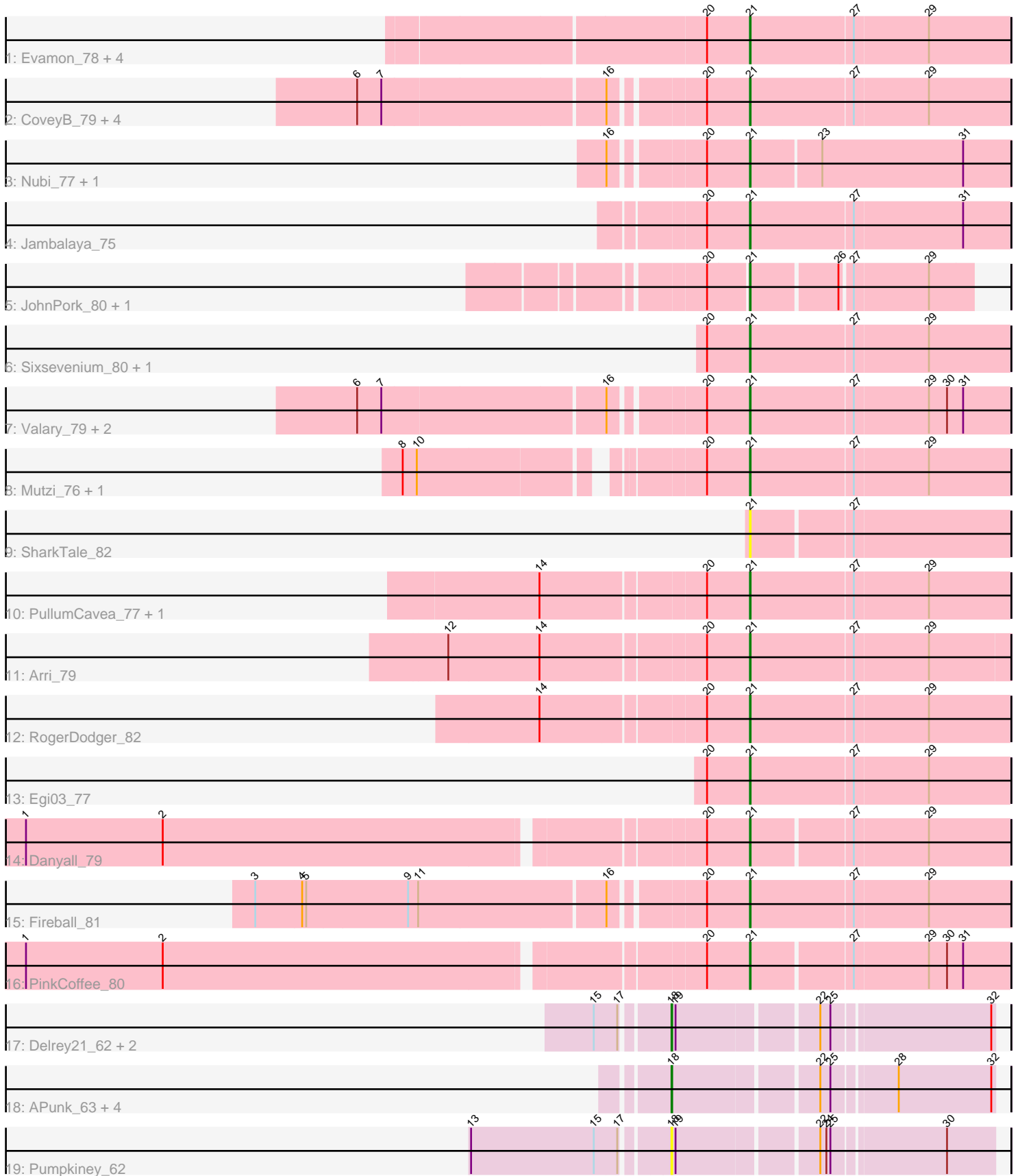


Pham 301529



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 301529 Report

This analysis was run 06/08/26 on database version 649.

Pham number 301529 has 40 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Evamon\_78, SmokingBunny\_79, Salvador\_78, Togo\_78, Twister6\_79
- Track 2 : CoveyB\_79, CherryCola\_78, Halo3\_76, Savbucketdawg\_74, Wizard\_75
- Track 3 : Nubi\_77, Sendy\_78
- Track 4 : Jambalaya\_75
- Track 5 : JohnPork\_80, Portcullis\_79
- Track 6 : Sixsevenium\_80, Bakery\_83
- Track 7 : Valary\_79, Gezellig\_75, KimmyK\_78
- Track 8 : Mutzi\_76, YungMoney\_77
- Track 9 : SharkTale\_82
- Track 10 : PullumCavea\_77, Phlop\_76
- Track 11 : Arri\_79
- Track 12 : RogerDodger\_82
- Track 13 : Egi03\_77
- Track 14 : Danyall\_79
- Track 15 : Fireball\_81
- Track 16 : PinkCoffee\_80
- Track 17 : Delrey21\_62, Verity\_62, DoctorFroggo\_62
- Track 18 : APunk\_63, Sampson\_63, BigHunkinEater\_65, ViaConlectus\_62, Zipp\_63
- Track 19 : Pumpkiney\_62

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

The start number called the most often in the published annotations is 21, it was called in 27 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arri\_79, Bakery\_83, CherryCola\_78, CoveyB\_79, Danyall\_79, Egi03\_77, Evamon\_78, Fireball\_81, Gezellig\_75, Halo3\_76, Jambalaya\_75, JohnPork\_80, KimmyK\_78, Mutzi\_76, Nubi\_77, Phlop\_76, PinkCoffee\_80, Portcullis\_79, PullumCavea\_77, RogerDodger\_82, Salvador\_78, Savbucketdawg\_74, Sendy\_78, SharkTale\_82, Sixsevenium\_80, SmokingBunny\_79, Togo\_78, Twister6\_79, Valary\_79, Wizard\_75, YungMoney\_77,

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

- 

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

- APunk\_63, BigHunkinEater\_65, Delrey21\_62, DoctorFroggo\_62, Pumpkiney\_62, Sampson\_63, Verity\_62, ViaConlectus\_62, Zipp\_63,

**Summary by start number:**

Start 18:

- Found in 9 of 40 ( 22.5% ) of genes in pham
- Manual Annotations of this start: 8 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: APunk\_63 (DE4), BigHunkinEater\_65 (DE4), Delrey21\_62 (DE4), DoctorFroggo\_62 (DE4), Pumpkiney\_62 (DE4), Sampson\_63 (DE4), Verity\_62 (DE4), ViaConlectus\_62 (DE4), Zipp\_63 (DE4),

Start 21:

- Found in 31 of 40 ( 77.5% ) of genes in pham
- Manual Annotations of this start: 27 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arri\_79 (DC1), Bakery\_83 (DC1), CherryCola\_78 (DC1), CoveyB\_79 (DC1), Danyall\_79 (DC1), Egi03\_77 (DC1), Evamon\_78 (DC1), Fireball\_81 (DC1), Gezellig\_75 (DC1), Halo3\_76 (DC1), Jambalaya\_75 (DC1), JohnPork\_80 (DC1), KimmyK\_78 (DC1), Mutzi\_76 (DC1), Nubi\_77 (DC1), Phlop\_76 (DC1), PinkCoffee\_80 (DC1), Portcullis\_79 (DC1), PullumCavea\_77 (DC1), RogerDodger\_82 (DC1), Salvador\_78 (DC1), Savbucketdawg\_74 (DC1), Sendy\_78 (DC1), SharkTale\_82 (DC1), Sixsevenium\_80 (DC1), SmokingBunny\_79 (DC1), Togo\_78 (DC1), Twister6\_79 (DC1), Valary\_79 (DC1), Wizard\_75 (DC1), YungMoney\_77 (DC1),

**Summary by clusters:**

There are 2 clusters represented in this pham: DE4, DC1,

Info for manual annotations of cluster DC1:

- Start number 21 was manually annotated 27 times for cluster DC1.

Info for manual annotations of cluster DE4:

- Start number 18 was manually annotated 8 times for cluster DE4.

**Gene Information:**

Gene: APunk\_63 Start: 48279, Stop: 48725, Start Num: 18

Candidate Starts for APunk\_63:

(Start: 18 @48279 has 8 MA's), (22, 48480), (25, 48495), (28, 48582), (32, 48720),

Gene: Arri\_79 Start: 52547, Stop: 52924, Start Num: 21

Candidate Starts for Arri\_79:

(12, 52118), (14, 52253), (20, 52484), (Start: 21 @52547 has 27 MA's), (27, 52697), (29, 52805),

Gene: Bakery\_83 Start: 54647, Stop: 55024, Start Num: 21

Candidate Starts for Bakery\_83:  
(20, 54584), (Start: 21 @54647 has 27 MA's), (27, 54797), (29, 54905),

Gene: BigHunkinEater\_65 Start: 47994, Stop: 48440, Start Num: 18  
Candidate Starts for BigHunkinEater\_65:  
(Start: 18 @47994 has 8 MA's), (22, 48195), (25, 48210), (28, 48297), (32, 48435),

Gene: CherryCola\_78 Start: 52895, Stop: 53272, Start Num: 21  
Candidate Starts for CherryCola\_78:  
(6, 52352), (7, 52388), (16, 52709), (20, 52832), (Start: 21 @52895 has 27 MA's), (27, 53045), (29, 53153),

Gene: CoveyB\_79 Start: 52387, Stop: 52764, Start Num: 21  
Candidate Starts for CoveyB\_79:  
(6, 51844), (7, 51880), (16, 52201), (20, 52324), (Start: 21 @52387 has 27 MA's), (27, 52537), (29, 52645),

Gene: Danyall\_79 Start: 52090, Stop: 52458, Start Num: 21  
Candidate Starts for Danyall\_79:  
(1, 51058), (2, 51262), (20, 52027), (Start: 21 @52090 has 27 MA's), (27, 52231), (29, 52339),

Gene: Delrey21\_62 Start: 49538, Stop: 49984, Start Num: 18  
Candidate Starts for Delrey21\_62:  
(15, 49445), (17, 49478), (Start: 18 @49538 has 8 MA's), (19, 49544), (22, 49739), (25, 49754), (32, 49979),

Gene: DoctorFroggo\_62 Start: 49538, Stop: 49984, Start Num: 18  
Candidate Starts for DoctorFroggo\_62:  
(15, 49445), (17, 49478), (Start: 18 @49538 has 8 MA's), (19, 49544), (22, 49739), (25, 49754), (32, 49979),

Gene: Egi03\_77 Start: 51947, Stop: 52324, Start Num: 21  
Candidate Starts for Egi03\_77:  
(20, 51884), (Start: 21 @51947 has 27 MA's), (27, 52097), (29, 52205),

Gene: Evamon\_78 Start: 52312, Stop: 52689, Start Num: 21  
Candidate Starts for Evamon\_78:  
(20, 52249), (Start: 21 @52312 has 27 MA's), (27, 52462), (29, 52570),

Gene: Fireball\_81 Start: 52875, Stop: 53255, Start Num: 21  
Candidate Starts for Fireball\_81:  
(3, 52179), (4, 52248), (5, 52254), (9, 52404), (11, 52419), (16, 52689), (20, 52812), (Start: 21 @52875 has 27 MA's), (27, 53025), (29, 53133),

Gene: Gezellig\_75 Start: 52140, Stop: 52517, Start Num: 21  
Candidate Starts for Gezellig\_75:  
(6, 51597), (7, 51633), (16, 51954), (20, 52077), (Start: 21 @52140 has 27 MA's), (27, 52290), (29, 52398), (30, 52425), (31, 52449),

Gene: Halo3\_76 Start: 52725, Stop: 53102, Start Num: 21  
Candidate Starts for Halo3\_76:  
(6, 52182), (7, 52218), (16, 52539), (20, 52662), (Start: 21 @52725 has 27 MA's), (27, 52875), (29, 52983),

Gene: Jambalaya\_75 Start: 51368, Stop: 51745, Start Num: 21  
Candidate Starts for Jambalaya\_75:  
(20, 51305), (Start: 21 @51368 has 27 MA's), (27, 51518), (31, 51677),

Gene: JohnPork\_80 Start: 52265, Stop: 52576, Start Num: 21  
Candidate Starts for JohnPork\_80:  
(20, 52208), (Start: 21 @52265 has 27 MA's), (26, 52388), (27, 52403), (29, 52511),

Gene: KimmyK\_78 Start: 52587, Stop: 52964, Start Num: 21  
Candidate Starts for KimmyK\_78:  
(6, 52044), (7, 52080), (16, 52401), (20, 52524), (Start: 21 @52587 has 27 MA's), (27, 52737), (29, 52845), (30, 52872), (31, 52896),

Gene: Mutzi\_76 Start: 52845, Stop: 53222, Start Num: 21  
Candidate Starts for Mutzi\_76:  
(8, 52392), (10, 52413), (20, 52782), (Start: 21 @52845 has 27 MA's), (27, 52995), (29, 53103),

Gene: Nubi\_77 Start: 51637, Stop: 52017, Start Num: 21  
Candidate Starts for Nubi\_77:  
(16, 51451), (20, 51574), (Start: 21 @51637 has 27 MA's), (23, 51736), (31, 51946),

Gene: Phlop\_76 Start: 52190, Stop: 52567, Start Num: 21  
Candidate Starts for Phlop\_76:  
(14, 51896), (20, 52127), (Start: 21 @52190 has 27 MA's), (27, 52340), (29, 52448),

Gene: PinkCoffee\_80 Start: 52131, Stop: 52499, Start Num: 21  
Candidate Starts for PinkCoffee\_80:  
(1, 51099), (2, 51303), (20, 52068), (Start: 21 @52131 has 27 MA's), (27, 52272), (29, 52380), (30, 52407), (31, 52431),

Gene: Portcullis\_79 Start: 52265, Stop: 52576, Start Num: 21  
Candidate Starts for Portcullis\_79:  
(20, 52208), (Start: 21 @52265 has 27 MA's), (26, 52388), (27, 52403), (29, 52511),

Gene: PullumCavea\_77 Start: 52367, Stop: 52744, Start Num: 21  
Candidate Starts for PullumCavea\_77:  
(14, 52073), (20, 52304), (Start: 21 @52367 has 27 MA's), (27, 52517), (29, 52625),

Gene: Pumpkiney\_62 Start: 46582, Stop: 47028, Start Num: 18  
Candidate Starts for Pumpkiney\_62:  
(13, 46306), (15, 46489), (17, 46522), (Start: 18 @46582 has 8 MA's), (19, 46588), (22, 46783), (24, 46792), (25, 46798), (30, 46957),

Gene: RogerDodger\_82 Start: 52955, Stop: 53332, Start Num: 21  
Candidate Starts for RogerDodger\_82:  
(14, 52661), (20, 52892), (Start: 21 @52955 has 27 MA's), (27, 53105), (29, 53213),

Gene: Salvador\_78 Start: 52310, Stop: 52687, Start Num: 21  
Candidate Starts for Salvador\_78:  
(20, 52247), (Start: 21 @52310 has 27 MA's), (27, 52460), (29, 52568),

Gene: Sampson\_63 Start: 48591, Stop: 49037, Start Num: 18

Candidate Starts for Sampson\_63:

(Start: 18 @48591 has 8 MA's), (22, 48792), (25, 48807), (28, 48894), (32, 49032),

Gene: Savbucketdawg\_74 Start: 51702, Stop: 52079, Start Num: 21

Candidate Starts for Savbucketdawg\_74:

(6, 51159), (7, 51195), (16, 51516), (20, 51639), (Start: 21 @51702 has 27 MA's), (27, 51852), (29, 51960),

Gene: Sendy\_78 Start: 51838, Stop: 52218, Start Num: 21

Candidate Starts for Sendy\_78:

(16, 51652), (20, 51775), (Start: 21 @51838 has 27 MA's), (23, 51937), (31, 52147),

Gene: SharkTale\_82 Start: 54567, Stop: 54935, Start Num: 21

Candidate Starts for SharkTale\_82:

(Start: 21 @54567 has 27 MA's), (27, 54708),

Gene: Sixsevenium\_80 Start: 53628, Stop: 54005, Start Num: 21

Candidate Starts for Sixsevenium\_80:

(20, 53565), (Start: 21 @53628 has 27 MA's), (27, 53778), (29, 53886),

Gene: SmokingBunny\_79 Start: 53306, Stop: 53683, Start Num: 21

Candidate Starts for SmokingBunny\_79:

(20, 53243), (Start: 21 @53306 has 27 MA's), (27, 53456), (29, 53564),

Gene: Togo\_78 Start: 53306, Stop: 53683, Start Num: 21

Candidate Starts for Togo\_78:

(20, 53243), (Start: 21 @53306 has 27 MA's), (27, 53456), (29, 53564),

Gene: Twister6\_79 Start: 51655, Stop: 52032, Start Num: 21

Candidate Starts for Twister6\_79:

(20, 51592), (Start: 21 @51655 has 27 MA's), (27, 51805), (29, 51913),

Gene: Valary\_79 Start: 52962, Stop: 53339, Start Num: 21

Candidate Starts for Valary\_79:

(6, 52419), (7, 52455), (16, 52776), (20, 52899), (Start: 21 @52962 has 27 MA's), (27, 53112), (29, 53220), (30, 53247), (31, 53271),

Gene: Verity\_62 Start: 49538, Stop: 49984, Start Num: 18

Candidate Starts for Verity\_62:

(15, 49445), (17, 49478), (Start: 18 @49538 has 8 MA's), (19, 49544), (22, 49739), (25, 49754), (32, 49979),

Gene: ViaConlectus\_62 Start: 47422, Stop: 47868, Start Num: 18

Candidate Starts for ViaConlectus\_62:

(Start: 18 @47422 has 8 MA's), (22, 47623), (25, 47638), (28, 47725), (32, 47863),

Gene: Wizard\_75 Start: 52140, Stop: 52517, Start Num: 21

Candidate Starts for Wizard\_75:

(6, 51597), (7, 51633), (16, 51954), (20, 52077), (Start: 21 @52140 has 27 MA's), (27, 52290), (29, 52398),

Gene: YungMoney\_77 Start: 53685, Stop: 54062, Start Num: 21

Candidate Starts for YungMoney\_77:

(8, 53232), (10, 53253), (20, 53622), (Start: 21 @53685 has 27 MA's), (27, 53835), (29, 53943),

Gene: Zipp\_63 Start: 49420, Stop: 49866, Start Num: 18

Candidate Starts for Zipp\_63:

(Start: 18 @49420 has 8 MA's), (22, 49621), (25, 49636), (28, 49723), (32, 49861),