

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 293182 Report

This analysis was run 04/18/26 on database version 643.

Pham number 293182 has 19 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Nozo_6
- Track 2 : Briakila_6
- Track 3 : Mortcellus_5
- Track 4 : Tydolla_6
- Track 5 : Chandler_6, Athena_6
- Track 6 : Pipefish_6
- Track 7 : Kronus_5, Marley1013_6, Morty007_6
- Track 8 : Neos5_6, Phlyer_6
- Track 9 : SlippinJimmy_6
- Track 10 : Deenasa_6
- Track 11 : RomaT_6, Chalmers_6
- Track 12 : QueenPie_4
- Track 13 : Vincenzo_5, AlanGrant_5

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

The start number called the most often in the published annotations is 6, it was called in 11 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Briakila_6, Chalmers_6, Deenasa_6, Kronus_5, Marley1013_6, Mortcellus_5, Morty007_6, Neos5_6, Nozo_6, Phlyer_6, RomaT_6, SlippinJimmy_6,

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

- Athena_6, Chandler_6, Pipefish_6, Tydolla_6,

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

- AlanGrant_5, QueenPie_4, Vincenzo_5,

Summary by start number:

Start 5:

- Found in 16 of 19 (84.2%) of genes in pham
- Manual Annotations of this start: 3 of 17

- Called 18.8% of time when present
- Phage (with cluster) where this start called: Athena_6 (B3), Chandler_6 (B3), Tydolla_6 (B3),

Start 6:

- Found in 16 of 19 (84.2%) of genes in pham
- Manual Annotations of this start: 11 of 17
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Briakila_6 (B3), Chalmers_6 (B3), Deenasa_6 (B3), Kronus_5 (B3), Marley1013_6 (B3), Mortcellus_5 (B3), Morty007_6 (B3), Neos5_6 (B3), Nozo_6 (B3), Phlyer_6 (B3), RomaT_6 (B3), SlippinJimmy_6 (B3),

Start 8:

- Found in 3 of 19 (15.8%) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant_5 (B4), QueenPie_4 (B4), Vincenzo_5 (B4),

Start 10:

- Found in 16 of 19 (84.2%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Pipefish_6 (B3),

Summary by clusters:

There are 2 clusters represented in this pham: B4, B3,

Info for manual annotations of cluster B3:

- Start number 5 was manually annotated 3 times for cluster B3.
- Start number 6 was manually annotated 11 times for cluster B3.
- Start number 10 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster B4:

- Start number 8 was manually annotated 2 times for cluster B4.

Gene Information:

Gene: AlanGrant_5 Start: 3145, Stop: 5796, Start Num: 8

Candidate Starts for AlanGrant_5:

(Start: 8 @3145 has 2 MA's), (11, 3295), (12, 3334), (13, 3364), (14, 3376), (15, 3412), (16, 3436), (17, 3469), (18, 3475), (20, 3511), (22, 3592), (24, 3667), (28, 3784), (29, 3826), (30, 3829), (31, 3862), (34, 3934), (35, 3952), (37, 4081), (40, 4114), (41, 4144), (43, 4207), (48, 4408), (49, 4453), (59, 4663), (61, 4735), (63, 4768), (64, 4852), (67, 4981), (68, 4984), (69, 5041), (72, 5155), (74, 5212), (76, 5254), (81, 5344), (82, 5353), (84, 5389), (85, 5392), (86, 5464), (89, 5539), (92, 5593), (94, 5611), (97, 5665), (99, 5698), (100, 5704), (102, 5719), (103, 5725), (104, 5737), (105, 5770),

Gene: Athena_6 Start: 2696, Stop: 5236, Start Num: 5

Candidate Starts for Athena_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Briakila_6 Start: 2714, Stop: 5236, Start Num: 6

Candidate Starts for Briakila_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (82, 4790), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Chalmers_6 Start: 2714, Stop: 5236, Start Num: 6

Candidate Starts for Chalmers_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Chandler_6 Start: 2696, Stop: 5236, Start Num: 5

Candidate Starts for Chandler_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Deenasa_6 Start: 2714, Stop: 5236, Start Num: 6

Candidate Starts for Deenasa_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (64, 4301), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Kronus_5 Start: 2562, Stop: 5084, Start Num: 6

Candidate Starts for Kronus_5:

(Start: 5 @2544 has 3 MA's), (Start: 6 @2562 has 11 MA's), (7, 2580), (Start: 10 @2661 has 1 MA's), (16, 2874), (17, 2904), (18, 2910), (19, 2937), (21, 2973), (23, 3057), (27, 3183), (29, 3261), (32, 3318), (33, 3351), (34, 3369), (35, 3387), (38, 3531), (39, 3534), (40, 3549), (43, 3642), (46, 3717), (47, 3762),

(53, 3855), (55, 3885), (58, 3972), (60, 4026), (66, 4227), (67, 4281), (70, 4401), (71, 4422), (75, 4518), (78, 4569), (79, 4599), (80, 4602), (84, 4674), (86, 4749), (87, 4776), (88, 4785), (90, 4836), (91, 4869), (93, 4884), (95, 4896), (98, 4956), (101, 4995), (102, 4998), (105, 5049),

Gene: Marley1013_6 Start: 2714, Stop: 5236, Start Num: 6

Candidate Starts for Marley1013_6:

(Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Mortcellus_5 Start: 2562, Stop: 5084, Start Num: 6

Candidate Starts for Mortcellus_5:

(1, 2088), (2, 2121), (3, 2187), (4, 2283), (Start: 5 @2544 has 3 MA's), (Start: 6 @2562 has 11 MA's), (7, 2580), (Start: 10 @2661 has 1 MA's), (16, 2874), (17, 2904), (18, 2910), (19, 2937), (21, 2973), (23, 3057), (27, 3183), (29, 3261), (32, 3318), (33, 3351), (34, 3369), (35, 3387), (38, 3531), (39, 3534), (40, 3549), (43, 3642), (46, 3717), (47, 3762), (51, 3822), (53, 3855), (58, 3972), (60, 4026), (66, 4227), (67, 4281), (70, 4401), (71, 4422), (75, 4518), (78, 4569), (79, 4599), (80, 4602), (84, 4674), (86, 4749), (87, 4776), (88, 4785), (90, 4836), (91, 4869), (93, 4884), (95, 4896), (98, 4956), (101, 4995), (102, 4998), (105, 5049),

Gene: Morty007_6 Start: 2714, Stop: 5236, Start Num: 6

Candidate Starts for Morty007_6:

(Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Neos5_6 Start: 2714, Stop: 5236, Start Num: 6

Candidate Starts for Neos5_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Nozo_6 Start: 2714, Stop: 5236, Start Num: 6

Candidate Starts for Nozo_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (82, 4790), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (97, 5096), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Phlyer_6 Start: 2714, Stop: 5236, Start Num: 6

Candidate Starts for Phlyer_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Pipefish_6 Start: 2918, Stop: 5341, Start Num: 10

Candidate Starts for Pipefish_6:

(1, 2345), (2, 2378), (3, 2444), (4, 2540), (Start: 5 @2801 has 3 MA's), (Start: 6 @2819 has 11 MA's), (7, 2837), (Start: 10 @2918 has 1 MA's), (16, 3131), (17, 3161), (18, 3167), (19, 3194), (21, 3230), (23, 3314), (27, 3440), (29, 3518), (32, 3575), (33, 3608), (34, 3626), (35, 3644), (38, 3788), (39, 3791), (40, 3806), (43, 3899), (46, 3974), (47, 4019), (53, 4112), (55, 4142), (58, 4229), (60, 4283), (66, 4484), (67, 4538), (70, 4658), (71, 4679), (75, 4775), (78, 4826), (79, 4856), (80, 4859), (84, 4931), (86, 5006), (87, 5033), (88, 5042), (90, 5093), (91, 5126), (93, 5141), (95, 5153), (97, 5201), (98, 5213), (101, 5252), (102, 5255), (105, 5306),

Gene: QueenPie_4 Start: 2367, Stop: 4886, Start Num: 8

Candidate Starts for QueenPie_4:

(Start: 8 @2367 has 2 MA's), (9, 2427), (11, 2517), (12, 2556), (13, 2586), (14, 2598), (15, 2634), (16, 2658), (17, 2691), (18, 2697), (20, 2733), (22, 2814), (24, 2889), (25, 2907), (26, 2949), (28, 3006), (29, 3048), (30, 3051), (32, 3105), (34, 3156), (35, 3174), (36, 3255), (40, 3336), (42, 3399), (44, 3429), (45, 3459), (50, 3600), (52, 3621), (54, 3651), (56, 3720), (57, 3732), (58, 3753), (60, 3807), (62, 3855), (63, 3864), (65, 3960), (67, 4077), (69, 4137), (72, 4251), (73, 4260), (75, 4320), (77, 4374), (79, 4407), (81, 4437), (82, 4446), (83, 4476), (84, 4482), (85, 4485), (86, 4557), (89, 4632), (92, 4686), (94, 4704), (96, 4734), (99, 4791), (100, 4797), (102, 4812), (105, 4863),

Gene: RomaT_6 Start: 2714, Stop: 5236, Start Num: 6

Candidate Starts for RomaT_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: SlippinJimmy_6 Start: 2714, Stop: 5236, Start Num: 6

Candidate Starts for SlippinJimmy_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23, 3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (64, 4301), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (82, 4790), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Tydolla_6 Start: 2696, Stop: 5236, Start Num: 5

Candidate Starts for Tydolla_6:

(1, 2240), (2, 2273), (3, 2339), (4, 2435), (Start: 5 @2696 has 3 MA's), (Start: 6 @2714 has 11 MA's), (7, 2732), (Start: 10 @2813 has 1 MA's), (16, 3026), (17, 3056), (18, 3062), (19, 3089), (21, 3125), (23,

3209), (27, 3335), (29, 3413), (32, 3470), (33, 3503), (34, 3521), (35, 3539), (38, 3683), (39, 3686), (40, 3701), (43, 3794), (46, 3869), (47, 3914), (53, 4007), (55, 4037), (58, 4124), (60, 4178), (66, 4379), (67, 4433), (70, 4553), (71, 4574), (75, 4670), (78, 4721), (79, 4751), (80, 4754), (84, 4826), (86, 4901), (87, 4928), (88, 4937), (90, 4988), (91, 5021), (93, 5036), (95, 5048), (97, 5096), (98, 5108), (101, 5147), (102, 5150), (105, 5201),

Gene: Vincenzo_5 Start: 3145, Stop: 5796, Start Num: 8

Candidate Starts for Vincenzo_5:

(Start: 8 @3145 has 2 MA's), (11, 3295), (12, 3334), (13, 3364), (14, 3376), (15, 3412), (16, 3436), (17, 3469), (18, 3475), (20, 3511), (22, 3592), (24, 3667), (28, 3784), (29, 3826), (30, 3829), (31, 3862), (34, 3934), (35, 3952), (37, 4081), (40, 4114), (41, 4144), (43, 4207), (48, 4408), (49, 4453), (59, 4663), (61, 4735), (63, 4768), (64, 4852), (67, 4981), (68, 4984), (69, 5041), (72, 5155), (74, 5212), (76, 5254), (81, 5344), (82, 5353), (84, 5389), (85, 5392), (86, 5464), (89, 5539), (92, 5593), (94, 5611), (97, 5665), (99, 5698), (100, 5704), (102, 5719), (103, 5725), (104, 5737), (105, 5770),