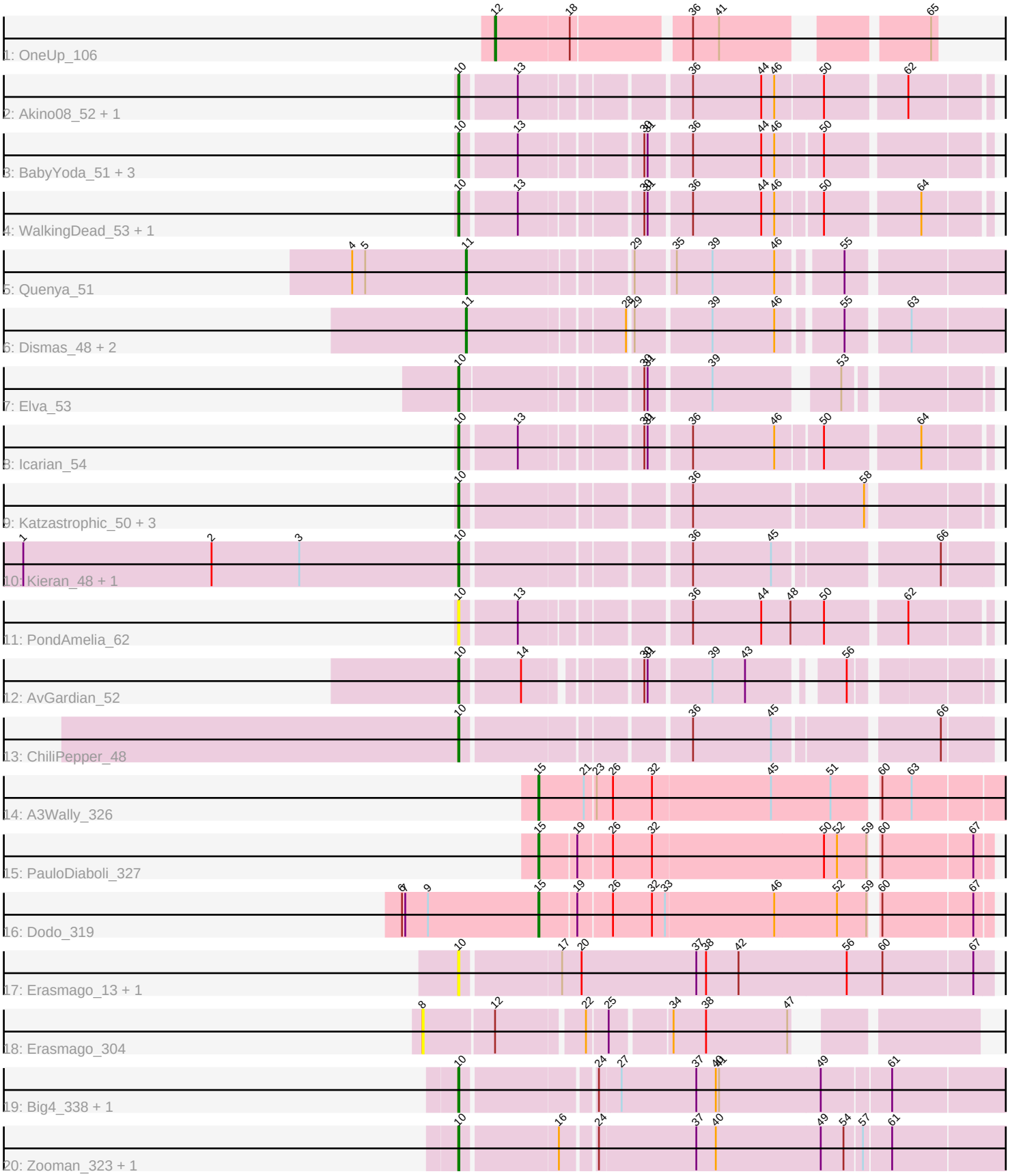
Pham 311833


1: OneUp_106
2: Akino08_52 + 1
3: BabyYoda_51 + 3
4: WalkingDead_53 + 1
5: Quenya_51
6: Dismas_48 + 2
7: Elva_53
8: Icarian_54
9: Katzastrophic_50 + 3
10: Kieran_48 + 1
11: PondAmelia_62
12: AvGardian_52
13: ChiliPepper_48
14: A3Wally_326
15: PauloDiaboli_327
16: Dodo_319
17: Erasmago_13 + 1
18: Erasmago_304
19: Big4_338 + 1
20: Zooman_323 + 1

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 311833 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311833 has 34 members, 6 are drafts.

Phages represented in each track:
- Track 1 : OneUp_106
- Track 2 : Akino08_52, Loviatar_52
- Track 3 : BabyYoda_51, Stromboli_51, DirtyBubble_50, SanaSana_53
- Track 4 : WalkingDead_53, Stoor_51
- Track 5 : Quenya_51
- Track 6 : Dismas_48, Rona_48, Sharkboy_49
- Track 7 : Elva_53
- Track 8 : Icarian_54
- Track 9 : Katzastrophic_50, Celaena_49, Bachaco_49, FlameThrower_48
- Track 10 : Kieran_48, Kamdara_48
- Track 11 : PondAmelia_62
- Track 12 : AvGardian_52
- Track 13 : ChiliPepper_48
- Track 14 : A3Wally_326
- Track 15 : PauloDiaboli_327
- Track 16 : Dodo_319
- Track 17 : Erasmago_13, Erasmago_351
- Track 18 : Erasmago_304
- Track 19 : Big4_338, Big4_12
- Track 20 : Zooman_323, Zooman_10

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

The start number called the most often in the published annotations is 10, it was called in 20 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Akino08_52, AvGardian_52, BabyYoda_51, Bachaco_49, Big4_12, Big4_338, Celaena_49, ChiliPepper_48, DirtyBubble_50, Elva_53, Erasmago_13, Erasmago_351, FlameThrower_48, Icarian_54, Kamdara_48, Katzastrophic_50, Kieran_48, Loviatar_52, PondAmelia_62, SanaSana_53, Stoor_51, Stromboli_51, WalkingDead_53, Zooman_10, Zooman_323,

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

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Genes that do not have the "Most Annotated" start:
• A3Wally_326, Dismas_48, Dodo_319, Erasmago_304, OneUp_106, PauloDiaboli_327, Quenya_51, Rona_48, Sharkboy_49,

Summary by start number:

Start 8:
• Found in 1 of 34 (2.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Erasmago_304 (GD2),

Start 10:
• Found in 25 of 34 (73.5%) of genes in pham
• Manual Annotations of this start: 20 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Akino08_52 (EB), AvGardian_52 (EB), BabyYoda_51 (EB), Bachaco_49 (EB), Big4_12 (GD2), Big4_338 (GD2), Celaena_49 (EB), ChiliPepper_48 (EB), DirtyBubble_50 (EB), Elva_53 (EB), Erasmago_13 (GD2), Erasmago_351 (GD2), FlameThrower_48 (EB), Icarian_54 (EB), Kamdara_48 (EB), Katzastrophic_50 (EB), Kieran_48 (EB), Loviatar_52 (EB), PondAmelia_62 (EB), SanaSana_53 (EB), Stoor_51 (EB), Stromboli_51 (EB), WalkingDead_53 (EB), Zooman_10 (GD2), Zooman_323 (GD2),

Start 11:
• Found in 4 of 34 (11.8%) of genes in pham
• Manual Annotations of this start: 4 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dismas_48 (EB), Quenya_51 (EB), Rona_48 (EB), Sharkboy_49 (EB),

Start 12:
• Found in 2 of 34 (5.9%) of genes in pham
• Manual Annotations of this start: 1 of 28
• Called 50.0% of time when present
• Phage (with cluster) where this start called: OneUp_106 (CQ2),

Start 15:
• Found in 3 of 34 (8.8%) of genes in pham
• Manual Annotations of this start: 3 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A3Wally_326 (GD1), Dodo_319 (GD1), PauloDiaboli_327 (GD1),

Summary by clusters:

There are 4 clusters represented in this pham: GD1, GD2, CQ2, EB,

Info for manual annotations of cluster CQ2:
•Start number 12 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster EB:
•Start number 10 was manually annotated 16 times for cluster EB.
•Start number 11 was manually annotated 4 times for cluster EB.

Info for manual annotations of cluster GD1:
•Start number 15 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 10 was manually annotated 4 times for cluster GD2.

Gene Information:

Gene: A3Wally_326 Start: 170993, Stop: 171403, Start Num: 15
Candidate Starts for A3Wally_326:
(Start: 15 @170993 has 3 MA's), (21, 171035), (23, 171044), (26, 171059), (32, 171095), (45, 171203), (51, 171257), (60, 171293), (63, 171320),

Gene: Akino08_52 Start: 36189, Stop: 36629, Start Num: 10
Candidate Starts for Akino08_52:
(Start: 10 @36189 has 20 MA's), (13, 36237), (36, 36375), (44, 36438), (46, 36450), (50, 36492), (62, 36561),

Gene: AvGardian_52 Start: 34737, Stop: 35147, Start Num: 10
Candidate Starts for AvGardian_52:
(Start: 10 @34737 has 20 MA's), (14, 34788), (30, 34878), (31, 34881), (39, 34935), (43, 34965), (56, 35037),

Gene: BabyYoda_51 Start: 35131, Stop: 35568, Start Num: 10
Candidate Starts for BabyYoda_51:
(Start: 10 @35131 has 20 MA's), (13, 35179), (30, 35278), (31, 35281), (36, 35317), (44, 35380), (46, 35392), (50, 35431),

Gene: Bachaco_49 Start: 35861, Stop: 36301, Start Num: 10
Candidate Starts for Bachaco_49:
(Start: 10 @35861 has 20 MA's), (36, 36050), (58, 36200),

Gene: Big4_338 Start: 180229, Stop: 180705, Start Num: 10
Candidate Starts for Big4_338:
(Start: 10 @180229 has 20 MA's), (24, 180340), (27, 180358), (37, 180427), (40, 180445), (41, 180448), (49, 180541), (61, 180601),

Gene: Big4_12 Start: 5535, Stop: 6011, Start Num: 10
Candidate Starts for Big4_12:
(Start: 10 @5535 has 20 MA's), (24, 5646), (27, 5664), (37, 5733), (40, 5751), (41, 5754), (49, 5847), (61, 5907),

Gene: Celaena_49 Start: 35623, Stop: 36063, Start Num: 10
Candidate Starts for Celaena_49:
(Start: 10 @35623 has 20 MA's), (36, 35812), (58, 35962),

Gene: ChiliPepper_48 Start: 34921, Stop: 35364, Start Num: 10

Candidate Starts for ChiliPepper_48:
(Start: 10 @34921 has 20 MA's), (36, 35110), (45, 35182), (66, 35320),

Gene: DirtyBubble_50 Start: 34799, Stop: 35236, Start Num: 10
Candidate Starts for DirtyBubble_50:
(Start: 10 @34799 has 20 MA's), (13, 34847), (30, 34946), (31, 34949), (36, 34985), (44, 35048), (46, 35060), (50, 35099),

Gene: Dismas_48 Start: 34843, Stop: 35286, Start Num: 11
Candidate Starts for Dismas_48:
(Start: 11 @34843 has 4 MA's), (28, 34978), (29, 34981), (39, 35047), (46, 35104), (55, 35155), (63, 35206),

Gene: Dodo_319 Start: 170077, Stop: 170469, Start Num: 15
Candidate Starts for Dodo_319:
(6, 169951), (7, 169954), (9, 169975), (Start: 15 @170077 has 3 MA's), (19, 170110), (26, 170140), (32, 170176), (33, 170188), (46, 170287), (52, 170344), (59, 170371), (60, 170374), (67, 170455),

Gene: Elva_53 Start: 35217, Stop: 35639, Start Num: 10
Candidate Starts for Elva_53:
(Start: 10 @35217 has 20 MA's), (30, 35367), (31, 35370), (39, 35424), (53, 35523),

Gene: Erasmago_13 Start: 4541, Stop: 5020, Start Num: 10
Candidate Starts for Erasmago_13:
(Start: 10 @4541 has 20 MA's), (17, 4628), (20, 4646), (37, 4751), (38, 4760), (42, 4790), (56, 4889), (60, 4922), (67, 5003),

Gene: Erasmago_304 Start: 162654, Stop: 163103, Start Num: 8
Candidate Starts for Erasmago_304:
(8, 162654), (Start: 12 @162717 has 1 MA's), (22, 162792), (25, 162810), (34, 162861), (38, 162891), (47, 162966),

Gene: Erasmago_351 Start: 179050, Stop: 179529, Start Num: 10
Candidate Starts for Erasmago_351:
(Start: 10 @179050 has 20 MA's), (17, 179137), (20, 179155), (37, 179260), (38, 179269), (42, 179299), (56, 179398), (60, 179431), (67, 179512),

Gene: FlameThrower_48 Start: 34660, Stop: 35100, Start Num: 10
Candidate Starts for FlameThrower_48:
(Start: 10 @34660 has 20 MA's), (36, 34849), (58, 34999),

Gene: Icarian_54 Start: 35804, Stop: 36241, Start Num: 10
Candidate Starts for Icarian_54:
(Start: 10 @35804 has 20 MA's), (13, 35852), (30, 35951), (31, 35954), (36, 35990), (46, 36065), (50, 36104), (64, 36185),

Gene: Kamdara_48 Start: 34881, Stop: 35324, Start Num: 10
Candidate Starts for Kamdara_48:
(1, 34479), (2, 34653), (3, 34734), (Start: 10 @34881 has 20 MA's), (36, 35070), (45, 35142), (66, 35280),

Gene: Katzastrophic_50 Start: 35170, Stop: 35610, Start Num: 10
Candidate Starts for Katzastrophic_50:

(Start: 10 @35170 has 20 MA's), (36, 35359), (58, 35509),

Gene: Kieran_48 Start: 34884, Stop: 35327, Start Num: 10
Candidate Starts for Kieran_48:
(1, 34482), (2, 34656), (3, 34737), (Start: 10 @34884 has 20 MA's), (36, 35073), (45, 35145), (66, 35283),

Gene: Loviatar_52 Start: 36204, Stop: 36644, Start Num: 10
Candidate Starts for Loviatar_52:
(Start: 10 @36204 has 20 MA's), (13, 36252), (36, 36390), (44, 36453), (46, 36465), (50, 36507), (62, 36576),

Gene: OneUp_106 Start: 66594, Stop: 66947, Start Num: 12
Candidate Starts for OneUp_106:
(Start: 12 @66594 has 1 MA's), (18, 66660), (36, 66759), (41, 66783), (65, 66942),

Gene: PauloDiaboli_327 Start: 168500, Stop: 168892, Start Num: 15
Candidate Starts for PauloDiaboli_327:
(Start: 15 @168500 has 3 MA's), (19, 168533), (26, 168563), (32, 168599), (50, 168755), (52, 168767), (59, 168794), (60, 168797), (67, 168878),

Gene: PondAmelia_62 Start: 35004, Stop: 35447, Start Num: 10
Candidate Starts for PondAmelia_62:
(Start: 10 @35004 has 20 MA's), (13, 35052), (36, 35190), (44, 35253), (48, 35280), (50, 35310), (62, 35379),

Gene: Quenya_51 Start: 35296, Stop: 35745, Start Num: 11
Candidate Starts for Quenya_51:
(4, 35191), (5, 35203), (Start: 11 @35296 has 4 MA's), (29, 35434), (35, 35467), (39, 35500), (46, 35557), (55, 35608),

Gene: Rona_48 Start: 34834, Stop: 35277, Start Num: 11
Candidate Starts for Rona_48:
(Start: 11 @34834 has 4 MA's), (28, 34969), (29, 34972), (39, 35038), (46, 35095), (55, 35146), (63, 35197),

Gene: SanaSana_53 Start: 35511, Stop: 35948, Start Num: 10
Candidate Starts for SanaSana_53:
(Start: 10 @35511 has 20 MA's), (13, 35559), (30, 35658), (31, 35661), (36, 35697), (44, 35760), (46, 35772), (50, 35811),

Gene: Sharkboy_49 Start: 34933, Stop: 35376, Start Num: 11
Candidate Starts for Sharkboy_49:
(Start: 11 @34933 has 4 MA's), (28, 35068), (29, 35071), (39, 35137), (46, 35194), (55, 35245), (63, 35296),

Gene: Stoor_51 Start: 35304, Stop: 35735, Start Num: 10
Candidate Starts for Stoor_51:
(Start: 10 @35304 has 20 MA's), (13, 35352), (30, 35451), (31, 35454), (36, 35490), (44, 35553), (46, 35565), (50, 35598), (64, 35679),

Gene: Stromboli_51 Start: 35169, Stop: 35606, Start Num: 10
Candidate Starts for Stromboli_51:

(Start: 10 @35169 has 20 MA's), (13, 35217), (30, 35316), (31, 35319), (36, 35355), (44, 35418), (46, 35430), (50, 35469),

Gene: WalkingDead_53 Start: 35918, Stop: 36355, Start Num: 10
Candidate Starts for WalkingDead_53:
(Start: 10 @35918 has 20 MA's), (13, 35966), (30, 36065), (31, 36068), (36, 36104), (44, 36167), (46, 36179), (50, 36218), (64, 36299),

Gene: Zooman_323 Start: 180374, Stop: 180850, Start Num: 10
Candidate Starts for Zooman_323:
(Start: 10 @180374 has 20 MA's), (16, 180458), (24, 180485), (37, 180572), (40, 180590), (49, 180686), (54, 180707), (57, 180722), (61, 180746),

Gene: Zooman_10 Start: 4723, Stop: 5199, Start Num: 10
Candidate Starts for Zooman_10:
(Start: 10 @4723 has 20 MA's), (16, 4807), (24, 4834), (37, 4921), (40, 4939), (49, 5035), (54, 5056), (57, 5071), (61, 5095),