Pham 157873


1: JC27_39 + 4
2: Kugel_40 + 1
3: Treddle_41 + 9
4: Euphoria_38 + 7
5: Carlyle_39 + 4
6: BigMau_40 + 6
7: LilBib_39
8: Jerm2_39 + 2
9: Forsytheast_38 + 6
10: Dulcie_37 + 1
11: Trouble_39
12: Monet_41 + 1
13: JackSparrow_40
14: Ciao_38 + 1
15: Sibs6_39
16: Gyzlar_36
17: Seanderson_39
18: Watermelon_40

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 157873 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157873 has 60 members, 3 are drafts.

Phages represented in each track:
• Track 1 : JC27_39, Acme_41, Fajezeel_40, Greg_40, Ashballer_40
• Track 2 : Kugel_40, Scowl_38
• Track 3 : Treddle_41, BeesKnees_39, Petruchio_39, Edtherson_40, Zephyr_39, DreamCatcher_41, PinkPlastic_37, Aeneas_41, Mule_37, Seabiscuit_40
• Track 4 : Euphoria_38, Marcell_38, SpikeBT_40, BillKnuckles_39, Norz_40, Pari_39, GageAP_40, U2_38
• Track 5 : Carlyle_39, Chanagan_37, PherrisBueller_39, Dreamboat_39, Jasper_39
• Track 6 : BigMau_40, Burton_39, Museum_40, Molly_40, Petp2012_40, TwoPeat_38, Bob3_37
• Track 7 : LilBib_39
• Track 8 : Jerm2_39, HermioneGrange_38, Rohr_39
• Track 9 : Forsytheast_38, SwissCheese_40, Corvo_39, HanShotFirst_37, Moose_38, Altman_40, Kanely_39
• Track 10 : Dulcie_37, Rutherferd_40
• Track 11 : Trouble_39
• Track 12 : Monet_41, Pepe_34
• Track 13 : JackSparrow_40
• Track 14 : Ciao_38, Pippin_40
• Track 15 : Sibs6_39
• Track 16 : Gyzlar_36
• Track 17 : Seanderson_39
• Track 18 : Watermelon_40

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

The start number called the most often in the published annotations is 8, it was called in 39 of the 57 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aeneas_41, Altman_40, BeesKnees_39, BigMau_40, BillKnuckles_39, Bob3_37, Burton_39, Carlyle_39, Chanagan_37, Corvo_39, DreamCatcher_41, Dreamboat_39, Edtherson_40, Euphoria_38, Forsytheast_38, GageAP_40, HanShotFirst_37, HermioneGrange_38, Jasper_39, Jerm2_39, Kanely_39, LilBib_39, Marcell_38, Molly_40, Moose_38, Mule_37, Museum_40, Norz_40, Pari_39, Petp2012_40,

Petruchio_39, PherrisBueller_39, PinkPlastic_37, Rohr_39, Seabiscuit_40, SpikeBT_40, SwissCheese_40, Treddle_41, TwoPeat_38, U2_38, Watermelon_40, Zephyr_39,

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

Genes that do not have the "Most Annotated" start:
• Acme_41, Ashballer_40, Ciao_38, Dulcie_37, Fajezeel_40, Greg_40, Gyzlar_36, JC27_39, JackSparrow_40, Kugel_40, Monet_41, Pepe_34, Pippin_40, Rutherferd_40, Scowl_38, Seanderson_39, Sibs6_39, Trouble_39,

Summary by start number:

Start 8:
• Found in 42 of 60 (70.0%) of genes in pham
• Manual Annotations of this start: 39 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aeneas_41 (A1), Altman_40 (A1), BeesKnees_39 (A1), BigMau_40 (A1), BillKnuckles_39 (A1), Bob3_37 (A1), Burton_39 (A1), Carlyle_39 (A1), Chanagan_37 (A1), Corvo_39 (A1), DreamCatcher_41 (A1), Dreamboat_39 (A1), Edtherson_40 (A1), Euphoria_38 (A1), Forsytheast_38 (A1), GageAP_40 (A1), HanShotFirst_37 (A1), HermioneGrange_38 (A1), Jasper_39 (A1), Jerm2_39 (A1), Kanely_39 (A1), LilBib_39 (A1), Marcell_38 (A1), Molly_40 (A1), Moose_38 (A1), Mule_37 (A1), Museum_40 (A1), Norz_40 (A1), Pari_39 (A1), Petp2012_40 (A1), Petruchio_39 (A1), PherrisBueller_39 (A1), PinkPlastic_37 (A1), Rohr_39 (A1), Seabiscuit_40 (A1), SpikeBT_40 (A1), SwissCheese_40 (A1), Treddle_41 (A1), TwoPeat_38 (A1), U2_38 (A1), Watermelon_40 (A1), Zephyr_39 (A1),

Start 9:
• Found in 18 of 60 (30.0%) of genes in pham
• Manual Annotations of this start: 18 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acme_41 (A1), Ashballer_40 (A1), Ciao_38 (A1), Dulcie_37 (A1), Fajezeel_40 (A1), Greg_40 (A1), Gyzlar_36 (A1), JC27_39 (A1), JackSparrow_40 (A1), Kugel_40 (A1), Monet_41 (A1), Pepe_34 (A1), Pippin_40 (A1), Rutherferd_40 (A1), Scowl_38 (A1), Seanderson_39 (A1), Sibs6_39 (A1), Trouble_39 (A1),

Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:
•Start number 8 was manually annotated 39 times for cluster A1.
•Start number 9 was manually annotated 18 times for cluster A1.

Gene Information:

Gene: Acme_41 Start: 31739, Stop: 31467, Start Num: 9

Candidate Starts for Acme_41:
(1, 31919), (3, 31853), (4, 31829), (5, 31817), (6, 31814), (Start: 9 @31739 has 18 MA's), (18, 31697), (20, 31670), (21, 31625), (22, 31616), (23, 31577), (24, 31490),

Gene: Aeneas_41 Start: 31799, Stop: 31530, Start Num: 8
Candidate Starts for Aeneas_41:
(2, 31934), (3, 31901), (Start: 8 @31799 has 39 MA's), (14, 31760), (20, 31733), (21, 31688), (22, 31679), (23, 31640),

Gene: Altman_40 Start: 32259, Stop: 31951, Start Num: 8
Candidate Starts for Altman_40:
(4, 32346), (Start: 8 @32259 has 39 MA's), (11, 32226), (16, 32190), (18, 32181), (21, 32109), (22, 32100), (23, 32061), (24, 31974),

Gene: Ashballer_40 Start: 32195, Stop: 31923, Start Num: 9
Candidate Starts for Ashballer_40:
(1, 32375), (3, 32309), (4, 32285), (5, 32273), (6, 32270), (Start: 9 @32195 has 18 MA's), (18, 32153), (20, 32126), (21, 32081), (22, 32072), (23, 32033), (24, 31946),

Gene: BeesKnees_39 Start: 31359, Stop: 31087, Start Num: 8
Candidate Starts for BeesKnees_39:
(2, 31494), (3, 31461), (Start: 8 @31359 has 39 MA's), (14, 31317), (20, 31290), (21, 31245), (22, 31236), (23, 31197),

Gene: BigMau_40 Start: 31436, Stop: 31206, Start Num: 8
Candidate Starts for BigMau_40:
(2, 31571), (3, 31538), (Start: 8 @31436 has 39 MA's), (14, 31394), (20, 31367), (23, 31316), (24, 31229),

Gene: BillKnuckles_39 Start: 32162, Stop: 31890, Start Num: 8
Candidate Starts for BillKnuckles_39:
(2, 32297), (3, 32264), (Start: 8 @32162 has 39 MA's), (14, 32120), (20, 32093), (21, 32048), (22, 32039), (23, 32000), (24, 31913),

Gene: Bob3_37 Start: 30786, Stop: 30556, Start Num: 8
Candidate Starts for Bob3_37:
(2, 30921), (3, 30888), (Start: 8 @30786 has 39 MA's), (14, 30744), (20, 30717), (23, 30666), (24, 30579),

Gene: Burton_39 Start: 31356, Stop: 31126, Start Num: 8
Candidate Starts for Burton_39:
(2, 31491), (3, 31458), (Start: 8 @31356 has 39 MA's), (14, 31314), (20, 31287), (23, 31236), (24, 31149),

Gene: Carlyle_39 Start: 30068, Stop: 29760, Start Num: 8
Candidate Starts for Carlyle_39:
(2, 30203), (3, 30170), (Start: 8 @30068 has 39 MA's), (13, 30017), (17, 29996), (21, 29918), (22, 29909), (23, 29870), (24, 29783),

Gene: Chanagan_37 Start: 30908, Stop: 30600, Start Num: 8
Candidate Starts for Chanagan_37:
(2, 31043), (3, 31010), (Start: 8 @30908 has 39 MA's), (13, 30857), (17, 30836), (21, 30758), (22, 30749), (23, 30710), (24, 30623),

Gene: Ciao_38 Start: 31210, Stop: 30938, Start Num: 9
Candidate Starts for Ciao_38:
(Start: 9 @31210 has 18 MA's), (18, 31168), (20, 31141), (21, 31096), (22, 31087), (23, 31048), (24, 30961),

Gene: Corvo_39 Start: 32273, Stop: 31965, Start Num: 8
Candidate Starts for Corvo_39:
(4, 32360), (Start: 8 @32273 has 39 MA's), (11, 32240), (16, 32204), (18, 32195), (21, 32123), (22, 32114), (23, 32075), (24, 31988),

Gene: DreamCatcher_41 Start: 32660, Stop: 32388, Start Num: 8
Candidate Starts for DreamCatcher_41:
(2, 32795), (3, 32762), (Start: 8 @32660 has 39 MA's), (14, 32618), (20, 32591), (21, 32546), (22, 32537), (23, 32498),

Gene: Dreamboat_39 Start: 31286, Stop: 30978, Start Num: 8
Candidate Starts for Dreamboat_39:
(2, 31421), (3, 31388), (Start: 8 @31286 has 39 MA's), (13, 31235), (17, 31214), (21, 31136), (22, 31127), (23, 31088), (24, 31001),

Gene: Dulcie_37 Start: 30943, Stop: 30671, Start Num: 9
Candidate Starts for Dulcie_37:
(Start: 9 @30943 has 18 MA's), (18, 30901), (20, 30874), (21, 30829), (22, 30820), (23, 30781),

Gene: Edtherson_40 Start: 32538, Stop: 32272, Start Num: 8
Candidate Starts for Edtherson_40:
(2, 32673), (3, 32640), (Start: 8 @32538 has 39 MA's), (14, 32496), (20, 32469), (21, 32424), (22, 32415), (23, 32376),

Gene: Euphoria_38 Start: 31379, Stop: 31107, Start Num: 8
Candidate Starts for Euphoria_38:
(2, 31514), (3, 31481), (Start: 8 @31379 has 39 MA's), (14, 31337), (20, 31310), (21, 31265), (22, 31256), (23, 31217), (24, 31130),

Gene: Fajezeel_40 Start: 31568, Stop: 31296, Start Num: 9
Candidate Starts for Fajezeel_40:
(1, 31748), (3, 31682), (4, 31658), (5, 31646), (6, 31643), (Start: 9 @31568 has 18 MA's), (18, 31526), (20, 31499), (21, 31454), (22, 31445), (23, 31406), (24, 31319),

Gene: Forsytheast_38 Start: 31551, Stop: 31243, Start Num: 8
Candidate Starts for Forsytheast_38:
(4, 31638), (Start: 8 @31551 has 39 MA's), (11, 31518), (16, 31482), (18, 31473), (21, 31401), (22, 31392), (23, 31353), (24, 31266),

Gene: GageAP_40 Start: 31664, Stop: 31392, Start Num: 8
Candidate Starts for GageAP_40:
(2, 31799), (3, 31766), (Start: 8 @31664 has 39 MA's), (14, 31622), (20, 31595), (21, 31550), (22, 31541), (23, 31502), (24, 31415),

Gene: Greg_40 Start: 31568, Stop: 31296, Start Num: 9
Candidate Starts for Greg_40:

(1, 31748), (3, 31682), (4, 31658), (5, 31646), (6, 31643), (Start: 9 @31568 has 18 MA's), (18, 31526), (20, 31499), (21, 31454), (22, 31445), (23, 31406), (24, 31319),

Gene: Gyzlar_36 Start: 30052, Stop: 29726, Start Num: 9
Candidate Starts for Gyzlar_36:
(2, 30190), (3, 30157), (Start: 9 @30052 has 18 MA's), (10, 30013), (12, 29995), (15, 29971), (19, 29953), (20, 29929), (21, 29884), (22, 29875), (23, 29836), (24, 29749),

Gene: HanShotFirst_37 Start: 30903, Stop: 30595, Start Num: 8
Candidate Starts for HanShotFirst_37:
(4, 30990), (Start: 8 @30903 has 39 MA's), (11, 30870), (16, 30834), (18, 30825), (21, 30753), (22, 30744), (23, 30705), (24, 30618),

Gene: HermioneGrange_38 Start: 31174, Stop: 30944, Start Num: 8
Candidate Starts for HermioneGrange_38:
(4, 31258), (Start: 8 @31174 has 39 MA's), (14, 31132), (20, 31105), (23, 31054), (24, 30967),

Gene: JC27_39 Start: 31765, Stop: 31493, Start Num: 9
Candidate Starts for JC27_39:
(1, 31945), (3, 31879), (4, 31855), (5, 31843), (6, 31840), (Start: 9 @31765 has 18 MA's), (18, 31723), (20, 31696), (21, 31651), (22, 31642), (23, 31603), (24, 31516),

Gene: JackSparrow_40 Start: 32093, Stop: 31791, Start Num: 9
Candidate Starts for JackSparrow_40:
(Start: 9 @32093 has 18 MA's), (13, 32042), (17, 32021), (21, 31943), (22, 31934), (23, 31895),

Gene: Jasper_39 Start: 31172, Stop: 30864, Start Num: 8
Candidate Starts for Jasper_39:
(2, 31307), (3, 31274), (Start: 8 @31172 has 39 MA's), (13, 31121), (17, 31100), (21, 31022), (22, 31013), (23, 30974), (24, 30887),

Gene: Jerm2_39 Start: 31429, Stop: 31199, Start Num: 8
Candidate Starts for Jerm2_39:
(4, 31513), (Start: 8 @31429 has 39 MA's), (14, 31387), (20, 31360), (23, 31309), (24, 31222),

Gene: Kanely_39 Start: 32035, Stop: 31727, Start Num: 8
Candidate Starts for Kanely_39:
(4, 32122), (Start: 8 @32035 has 39 MA's), (11, 32002), (16, 31966), (18, 31957), (21, 31885), (22, 31876), (23, 31837), (24, 31750),

Gene: Kugel_40 Start: 31983, Stop: 31717, Start Num: 9
Candidate Starts for Kugel_40:
(3, 32097), (4, 32073), (5, 32061), (6, 32058), (Start: 9 @31983 has 18 MA's), (18, 31941), (20, 31914), (21, 31869), (22, 31860), (23, 31821),

Gene: LilBib_39 Start: 32107, Stop: 31799, Start Num: 8
Candidate Starts for LilBib_39:
(4, 32194), (Start: 8 @32107 has 39 MA's), (13, 32056), (17, 32035), (21, 31957), (22, 31948), (23, 31909),

Gene: Marcell_38 Start: 31685, Stop: 31413, Start Num: 8
Candidate Starts for Marcell_38:

(2, 31820), (3, 31787), (Start: 8 @31685 has 39 MA's), (14, 31643), (20, 31616), (21, 31571), (22, 31562), (23, 31523), (24, 31436),

Gene: Molly_40 Start: 31229, Stop: 30999, Start Num: 8
Candidate Starts for Molly_40:
(2, 31364), (3, 31331), (Start: 8 @31229 has 39 MA's), (14, 31187), (20, 31160), (23, 31109), (24, 31022),

Gene: Monet_41 Start: 33055, Stop: 32789, Start Num: 9
Candidate Starts for Monet_41:
(7, 33091), (Start: 9 @33055 has 18 MA's), (18, 33013), (20, 32986), (21, 32941), (22, 32932), (23, 32893),

Gene: Moose_38 Start: 31551, Stop: 31243, Start Num: 8
Candidate Starts for Moose_38:
(4, 31638), (Start: 8 @31551 has 39 MA's), (11, 31518), (16, 31482), (18, 31473), (21, 31401), (22, 31392), (23, 31353), (24, 31266),

Gene: Mule_37 Start: 29541, Stop: 29269, Start Num: 8
Candidate Starts for Mule_37:
(2, 29676), (3, 29643), (Start: 8 @29541 has 39 MA's), (14, 29499), (20, 29472), (21, 29427), (22, 29418), (23, 29379),

Gene: Museum_40 Start: 31295, Stop: 31065, Start Num: 8
Candidate Starts for Museum_40:
(2, 31430), (3, 31397), (Start: 8 @31295 has 39 MA's), (14, 31253), (20, 31226), (23, 31175), (24, 31088),

Gene: Norz_40 Start: 32172, Stop: 31900, Start Num: 8
Candidate Starts for Norz_40:
(2, 32307), (3, 32274), (Start: 8 @32172 has 39 MA's), (14, 32130), (20, 32103), (21, 32058), (22, 32049), (23, 32010), (24, 31923),

Gene: Pari_39 Start: 31087, Stop: 30815, Start Num: 8
Candidate Starts for Pari_39:
(2, 31222), (3, 31189), (Start: 8 @31087 has 39 MA's), (14, 31045), (20, 31018), (21, 30973), (22, 30964), (23, 30925), (24, 30838),

Gene: Pepe_34 Start: 29170, Stop: 28904, Start Num: 9
Candidate Starts for Pepe_34:
(7, 29206), (Start: 9 @29170 has 18 MA's), (18, 29128), (20, 29101), (21, 29056), (22, 29047), (23, 29008),

Gene: Petp2012_40 Start: 32213, Stop: 31983, Start Num: 8
Candidate Starts for Petp2012_40:
(2, 32348), (3, 32315), (Start: 8 @32213 has 39 MA's), (14, 32171), (20, 32144), (23, 32093), (24, 32006),

Gene: Petruchio_39 Start: 31567, Stop: 31298, Start Num: 8
Candidate Starts for Petruchio_39:
(2, 31702), (3, 31669), (Start: 8 @31567 has 39 MA's), (14, 31528), (20, 31501), (21, 31456), (22, 31447), (23, 31408),

Gene: PherrisBueller_39 Start: 31183, Stop: 30875, Start Num: 8
Candidate Starts for PherrisBueller_39:
(2, 31318), (3, 31285), (Start: 8 @31183 has 39 MA's), (13, 31132), (17, 31111), (21, 31033), (22, 31024), (23, 30985), (24, 30898),

Gene: PinkPlastic_37 Start: 31097, Stop: 30825, Start Num: 8
Candidate Starts for PinkPlastic_37:
(2, 31232), (3, 31199), (Start: 8 @31097 has 39 MA's), (14, 31055), (20, 31028), (21, 30983), (22, 30974), (23, 30935),

Gene: Pippin_40 Start: 31627, Stop: 31355, Start Num: 9
Candidate Starts for Pippin_40:
(Start: 9 @31627 has 18 MA's), (18, 31585), (20, 31558), (21, 31513), (22, 31504), (23, 31465), (24, 31378),

Gene: Rohr_39 Start: 31475, Stop: 31245, Start Num: 8
Candidate Starts for Rohr_39:
(4, 31559), (Start: 8 @31475 has 39 MA's), (14, 31433), (20, 31406), (23, 31355), (24, 31268),

Gene: Rutherferd_40 Start: 32367, Stop: 32101, Start Num: 9
Candidate Starts for Rutherferd_40:
(Start: 9 @32367 has 18 MA's), (18, 32325), (20, 32298), (21, 32253), (22, 32244), (23, 32205),

Gene: Scowl_38 Start: 31823, Stop: 31551, Start Num: 9
Candidate Starts for Scowl_38:
(3, 31937), (4, 31913), (5, 31901), (6, 31898), (Start: 9 @31823 has 18 MA's), (18, 31781), (20, 31754), (21, 31709), (22, 31700), (23, 31661),

Gene: Seabiscuit_40 Start: 31328, Stop: 31056, Start Num: 8
Candidate Starts for Seabiscuit_40:
(2, 31463), (3, 31430), (Start: 8 @31328 has 39 MA's), (14, 31286), (20, 31259), (21, 31214), (22, 31205), (23, 31166),

Gene: Seanderson_39 Start: 31957, Stop: 31685, Start Num: 9
Candidate Starts for Seanderson_39:
(7, 31993), (Start: 9 @31957 has 18 MA's), (18, 31915), (20, 31888), (21, 31843), (22, 31834), (23, 31795), (24, 31708),

Gene: Sibs6_39 Start: 30489, Stop: 30181, Start Num: 9
Candidate Starts for Sibs6_39:
(Start: 9 @30489 has 18 MA's), (13, 30438), (17, 30417), (21, 30339), (22, 30330), (23, 30291),

Gene: SpikeBT_40 Start: 32361, Stop: 32089, Start Num: 8
Candidate Starts for SpikeBT_40:
(2, 32496), (3, 32463), (Start: 8 @32361 has 39 MA's), (14, 32319), (20, 32292), (21, 32247), (22, 32238), (23, 32199), (24, 32112),

Gene: SwissCheese_40 Start: 32051, Stop: 31743, Start Num: 8
Candidate Starts for SwissCheese_40:
(4, 32138), (Start: 8 @32051 has 39 MA's), (11, 32018), (16, 31982), (18, 31973), (21, 31901), (22, 31892), (23, 31853), (24, 31766),

Gene: Treddle_41 Start: 33009, Stop: 32743, Start Num: 8

Candidate Starts for Treddle_41:
(2, 33144), (3, 33111), (Start: 8 @33009 has 39 MA's), (14, 32967), (20, 32940), (21, 32895), (22, 32886), (23, 32847),

Gene: Trouble_39 Start: 32267, Stop: 31995, Start Num: 9
Candidate Starts for Trouble_39:
(1, 32447), (3, 32381), (4, 32357), (5, 32345), (6, 32342), (Start: 9 @32267 has 18 MA's), (18, 32225), (20, 32198), (21, 32153), (22, 32144), (23, 32105),

Gene: TwoPeat_38 Start: 31714, Stop: 31484, Start Num: 8
Candidate Starts for TwoPeat_38:
(2, 31849), (3, 31816), (Start: 8 @31714 has 39 MA's), (14, 31672), (20, 31645), (23, 31594), (24, 31507),

Gene: U2_38 Start: 31407, Stop: 31135, Start Num: 8
Candidate Starts for U2_38:
(2, 31542), (3, 31509), (Start: 8 @31407 has 39 MA's), (14, 31365), (20, 31338), (21, 31293), (22, 31284), (23, 31245), (24, 31158),

Gene: Watermelon_40 Start: 32252, Stop: 31944, Start Num: 8
Candidate Starts for Watermelon_40:
(4, 32339), (Start: 8 @32252 has 39 MA's), (13, 32201), (17, 32180), (21, 32102), (22, 32093), (23, 32054), (24, 31967),

Gene: Zephyr_39 Start: 31816, Stop: 31544, Start Num: 8
Candidate Starts for Zephyr_39:
(2, 31951), (3, 31918), (Start: 8 @31816 has 39 MA's), (14, 31774), (20, 31747), (21, 31702), (22, 31693), (23, 31654),