Pham 85999

1: Constella_146 + 19
2: LittleE_155 + 2
3: Dove_148 + 2
4: Courthouse_147 + 5
5: Porcelain_148 + 1
6: Bombitas_140 + 3
7: HokkenD_147
8: Lucky2013_144
9: Kalah2_145
10: BAKA_155

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 85999 Report

This analysis was run 04/28/24 on database version 559.

Pham number 85999 has 42 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Constella_146, Redno2_147, Bobby_144, Ejimix_146, DmpstrDiver_154, Halley_155, Zelink_148, Duke13_151, Dallas_154, Phoebus_154, Yeet_146, Schatzie_149, ThreeRngTarjay_149, Odette_158, EricMillard_147, Thibault_136, Beem_155, Bagrid_157, JuicyJay_148, Hughesyang_153
• Track 2 : LittleE_155, Optimus_146, Omega_159
• Track 3 : Dove_148, NihilNomen_155, Pound_145
• Track 4 : Courthouse_147, Ariel_151, KashFlow_152, Gonephishing_146, Superphikiman_149, Squint_144
• Track 5 : Porcelain_148, MiaZeal_151
• Track 6 : Bombitas_140, Wanda_153, Minerva_153, Klein_152
• Track 7 : HokkenD_147
• Track 8 : Lucky2013_144
• Track 9 : Kalah2_145
• Track 10 : BAKA_155

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

The start number called the most often in the published annotations is 4, it was called in 31 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ariel_151, Bagrid_157, Beem_155, Bobby_144, Constella_146, Courthouse_147, Dallas_154, DmpstrDiver_154, Dove_148, Duke13_151, Ejimix_146, EricMillard_147, Gonephishing_146, Halley_155, Hughesyang_153, JuicyJay_148, Kalah2_145, KashFlow_152, LittleE_155, MiaZeal_151, NihilNomen_155, Odette_158, Omega_159, Optimus_146, Phoebus_154, Porcelain_148, Pound_145, Redno2_147, Schatzie_149, Squint_144, Superphikiman_149, Thibault_136, ThreeRngTarjay_149, Yeet_146, Zelink_148,

Genes that have the "Most Annotated" start but do not call it:
• BAKA_155, Bombitas_140, HokkenD_147, Klein_152, Lucky2013_144, Minerva_153, Wanda_153,

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

•

Summary by start number:

Start 1:
• Found in 7 of 42 (16.7%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 14.3% of time when present
• Phage (with cluster) where this start called: HokkenD_147 (J),

Start 2:
• Found in 3 of 42 (7.1%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Lucky2013_144 (J),

Start 3:
• Found in 29 of 42 (69.0%) of genes in pham
• Manual Annotations of this start: 5 of 38
• Called 17.2% of time when present
• Phage (with cluster) where this start called: BAKA_155 (J), Bombitas_140 (J), Klein_152 (J), Minerva_153 (J), Wanda_153 (J),

Start 4:
• Found in 42 of 42 (100.0%) of genes in pham
• Manual Annotations of this start: 31 of 38
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Ariel_151 (J), Bagrid_157 (J), Beem_155 (J), Bobby_144 (J), Constella_146 (J), Courthouse_147 (J), Dallas_154 (J), DmpstrDiver_154 (J), Dove_148 (J), Duke13_151 (J), Ejimix_146 (J), EricMillard_147 (J), Gonephishing_146 (J), Halley_155 (J), Hughesyang_153 (J), JuicyJay_148 (J), Kalah2_145 (J), KashFlow_152 (J), LittleE_155 (J), MiaZeal_151 (J), NihilNomen_155 (J), Odette_158 (J), Omega_159 (J), Optimus_146 (J), Phoebus_154 (J), Porcelain_148 (J), Pound_145 (J), Redno2_147 (J), Schatzie_149 (J), Squint_144 (J), Superphikiman_149 (J), Thibault_136 (J), ThreeRngTarjay_149 (J), Yeet_146 (J), Zelink_148 (J),

Summary by clusters:

There is one cluster represented in this pham: J

Info for manual annotations of cluster J:
•Start number 1 was manually annotated 1 time for cluster J.
•Start number 2 was manually annotated 1 time for cluster J.
•Start number 3 was manually annotated 5 times for cluster J.
•Start number 4 was manually annotated 31 times for cluster J.

Gene Information:

Gene: Ariel_151 Start: 77763, Stop: 78242, Start Num: 4
Candidate Starts for Ariel_151:

(Start: 1 @77727 has 1 MA's), (Start: 4 @77763 has 31 MA's), (6, 77808), (8, 77898), (9, 77982), (10, 78006), (11, 78057), (12, 78066), (14, 78087), (16, 78129), (18, 78150), (19, 78180),

Gene: BAKA_155 Start: 81904, Stop: 82407, Start Num: 3
Candidate Starts for BAKA_155:
(Start: 3 @81904 has 5 MA's), (Start: 4 @81910 has 31 MA's), (5, 81949), (6, 81952), (8, 82054), (9, 82138), (10, 82162), (11, 82213), (12, 82222), (13, 82228), (15, 82279), (17, 82300), (19, 82336),

Gene: Bagrid_157 Start: 82931, Stop: 83419, Start Num: 4
Candidate Starts for Bagrid_157:
(Start: 3 @82925 has 5 MA's), (Start: 4 @82931 has 31 MA's), (5, 82970), (6, 82973), (8, 83075), (9, 83159), (10, 83183), (11, 83234), (12, 83243), (14, 83264), (16, 83306), (18, 83327), (19, 83357),

Gene: Beem_155 Start: 82038, Stop: 82526, Start Num: 4
Candidate Starts for Beem_155:
(Start: 3 @82032 has 5 MA's), (Start: 4 @82038 has 31 MA's), (5, 82077), (6, 82080), (8, 82182), (9, 82266), (10, 82290), (11, 82341), (12, 82350), (14, 82371), (16, 82413), (18, 82434), (19, 82464),

Gene: Bobby_144 Start: 82349, Stop: 82837, Start Num: 4
Candidate Starts for Bobby_144:
(Start: 3 @82343 has 5 MA's), (Start: 4 @82349 has 31 MA's), (5, 82388), (6, 82391), (8, 82493), (9, 82577), (10, 82601), (11, 82652), (12, 82661), (14, 82682), (16, 82724), (18, 82745), (19, 82775),

Gene: Bombitas_140 Start: 78885, Stop: 79379, Start Num: 3
Candidate Starts for Bombitas_140:
(Start: 3 @78885 has 5 MA's), (Start: 4 @78891 has 31 MA's), (5, 78930), (6, 78933), (8, 79035), (9, 79119), (10, 79143), (11, 79194), (12, 79203), (14, 79224), (16, 79266), (18, 79287), (19, 79317),

Gene: Constella_146 Start: 80100, Stop: 80588, Start Num: 4
Candidate Starts for Constella_146:
(Start: 3 @80094 has 5 MA's), (Start: 4 @80100 has 31 MA's), (5, 80139), (6, 80142), (8, 80244), (9, 80328), (10, 80352), (11, 80403), (12, 80412), (14, 80433), (16, 80475), (18, 80496), (19, 80526),

Gene: Courthouse_147 Start: 77621, Stop: 78100, Start Num: 4
Candidate Starts for Courthouse_147:
(Start: 1 @77585 has 1 MA's), (Start: 4 @77621 has 31 MA's), (6, 77666), (8, 77756), (9, 77840), (10, 77864), (11, 77915), (12, 77924), (14, 77945), (16, 77987), (18, 78008), (19, 78038),

Gene: Dallas_154 Start: 81261, Stop: 81749, Start Num: 4
Candidate Starts for Dallas_154:
(Start: 3 @81255 has 5 MA's), (Start: 4 @81261 has 31 MA's), (5, 81300), (6, 81303), (8, 81405), (9, 81489), (10, 81513), (11, 81564), (12, 81573), (14, 81594), (16, 81636), (18, 81657), (19, 81687),

Gene: DmpstrDiver_154 Start: 81068, Stop: 81556, Start Num: 4
Candidate Starts for DmpstrDiver_154:
(Start: 3 @81062 has 5 MA's), (Start: 4 @81068 has 31 MA's), (5, 81107), (6, 81110), (8, 81212), (9, 81296), (10, 81320), (11, 81371), (12, 81380), (14, 81401), (16, 81443), (18, 81464), (19, 81494),

Gene: Dove_148 Start: 77256, Stop: 77744, Start Num: 4
Candidate Starts for Dove_148:
(Start: 3 @77250 has 5 MA's), (Start: 4 @77256 has 31 MA's), (5, 77295), (6, 77298), (8, 77400), (9, 77484), (10, 77508), (11, 77559), (12, 77568), (13, 77574), (14, 77589), (16, 77631), (18, 77652), (19, 77682),

Gene: Duke13_151 Start: 80189, Stop: 80677, Start Num: 4
Candidate Starts for Duke13_151:
(Start: 3 @80183 has 5 MA's), (Start: 4 @80189 has 31 MA's), (5, 80228), (6, 80231), (8, 80333), (9, 80417), (10, 80441), (11, 80492), (12, 80501), (14, 80522), (16, 80564), (18, 80585), (19, 80615),

Gene: Ejimix_146 Start: 81329, Stop: 81817, Start Num: 4
Candidate Starts for Ejimix_146:
(Start: 3 @81323 has 5 MA's), (Start: 4 @81329 has 31 MA's), (5, 81368), (6, 81371), (8, 81473), (9, 81557), (10, 81581), (11, 81632), (12, 81641), (14, 81662), (16, 81704), (18, 81725), (19, 81755),

Gene: EricMillard_147 Start: 81541, Stop: 82029, Start Num: 4
Candidate Starts for EricMillard_147:
(Start: 3 @81535 has 5 MA's), (Start: 4 @81541 has 31 MA's), (5, 81580), (6, 81583), (8, 81685), (9, 81769), (10, 81793), (11, 81844), (12, 81853), (14, 81874), (16, 81916), (18, 81937), (19, 81967),

Gene: Gonephishing_146 Start: 79709, Stop: 80188, Start Num: 4
Candidate Starts for Gonephishing_146:
(Start: 1 @79673 has 1 MA's), (Start: 4 @79709 has 31 MA's), (6, 79754), (8, 79844), (9, 79928), (10, 79952), (11, 80003), (12, 80012), (14, 80033), (16, 80075), (18, 80096), (19, 80126),

Gene: Halley_155 Start: 81645, Stop: 82133, Start Num: 4
Candidate Starts for Halley_155:
(Start: 3 @81639 has 5 MA's), (Start: 4 @81645 has 31 MA's), (5, 81684), (6, 81687), (8, 81789), (9, 81873), (10, 81897), (11, 81948), (12, 81957), (14, 81978), (16, 82020), (18, 82041), (19, 82071),

Gene: HokkenD_147 Start: 82942, Stop: 83457, Start Num: 1
Candidate Starts for HokkenD_147:
(Start: 1 @82942 has 1 MA's), (Start: 4 @82978 has 31 MA's), (6, 83023), (8, 83113), (9, 83197), (10, 83221), (11, 83272), (12, 83281), (14, 83302), (16, 83344), (18, 83365), (19, 83395),

Gene: Hughesyang_153 Start: 82004, Stop: 82492, Start Num: 4
Candidate Starts for Hughesyang_153:
(Start: 3 @81998 has 5 MA's), (Start: 4 @82004 has 31 MA's), (5, 82043), (6, 82046), (8, 82148), (9, 82232), (10, 82256), (11, 82307), (12, 82316), (14, 82337), (16, 82379), (18, 82400), (19, 82430),

Gene: JuicyJay_148 Start: 82616, Stop: 83104, Start Num: 4
Candidate Starts for JuicyJay_148:
(Start: 3 @82610 has 5 MA's), (Start: 4 @82616 has 31 MA's), (5, 82655), (6, 82658), (8, 82760), (9, 82844), (10, 82868), (11, 82919), (12, 82928), (14, 82949), (16, 82991), (18, 83012), (19, 83042),

Gene: Kalah2_145 Start: 81134, Stop: 81622, Start Num: 4
Candidate Starts for Kalah2_145:
(Start: 3 @81128 has 5 MA's), (Start: 4 @81134 has 31 MA's), (5, 81173), (6, 81176), (9, 81362), (10, 81386), (11, 81437), (12, 81446), (14, 81467), (16, 81509), (18, 81530), (19, 81560),

Gene: KashFlow_152 Start: 80641, Stop: 81120, Start Num: 4
Candidate Starts for KashFlow_152:
(Start: 1 @80605 has 1 MA's), (Start: 4 @80641 has 31 MA's), (6, 80686), (8, 80776), (9, 80860), (10, 80884), (11, 80935), (12, 80944), (14, 80965), (16, 81007), (18, 81028), (19, 81058),

Gene: Klein_152 Start: 80679, Stop: 81149, Start Num: 3
Candidate Starts for Klein_152:

(Start: 3 @80679 has 5 MA's), (Start: 4 @80685 has 31 MA's), (5, 80724), (6, 80727), (8, 80829), (9, 80913), (10, 80937), (11, 80988), (12, 80997), (14, 81018), (16, 81060), (18, 81081), (19, 81111),

Gene: LittleE_155 Start: 81566, Stop: 82051, Start Num: 4
Candidate Starts for LittleE_155:
(Start: 4 @81566 has 31 MA's), (5, 81605), (6, 81608), (7, 81677), (9, 81782), (10, 81806), (11, 81857), (12, 81866), (13, 81872), (15, 81923), (17, 81944), (19, 81980),

Gene: Lucky2013_144 Start: 76447, Stop: 76965, Start Num: 2
Candidate Starts for Lucky2013_144:
(Start: 2 @76447 has 1 MA's), (Start: 4 @76477 has 31 MA's), (5, 76516), (6, 76519), (7, 76588), (9, 76693), (11, 76768), (14, 76798), (15, 76834), (19, 76891),

Gene: MiaZeal_151 Start: 77624, Stop: 78112, Start Num: 4
Candidate Starts for MiaZeal_151:
(Start: 2 @77594 has 1 MA's), (Start: 4 @77624 has 31 MA's), (5, 77663), (6, 77666), (7, 77735), (9, 77840), (11, 77915), (14, 77945), (15, 77981), (19, 78038),

Gene: Minerva_153 Start: 80947, Stop: 81441, Start Num: 3
Candidate Starts for Minerva_153:
(Start: 3 @80947 has 5 MA's), (Start: 4 @80953 has 31 MA's), (5, 80992), (6, 80995), (8, 81097), (9, 81181), (10, 81205), (11, 81256), (12, 81265), (14, 81286), (16, 81328), (18, 81349), (19, 81379),

Gene: NihilNomen_155 Start: 80742, Stop: 81230, Start Num: 4
Candidate Starts for NihilNomen_155:
(Start: 3 @80736 has 5 MA's), (Start: 4 @80742 has 31 MA's), (5, 80781), (6, 80784), (8, 80886), (9, 80970), (10, 80994), (11, 81045), (12, 81054), (13, 81060), (14, 81075), (16, 81117), (18, 81138), (19, 81168),

Gene: Odette_158 Start: 83233, Stop: 83721, Start Num: 4
Candidate Starts for Odette_158:
(Start: 3 @83227 has 5 MA's), (Start: 4 @83233 has 31 MA's), (5, 83272), (6, 83275), (8, 83377), (9, 83461), (10, 83485), (11, 83536), (12, 83545), (14, 83566), (16, 83608), (18, 83629), (19, 83659),

Gene: Omega_159 Start: 82730, Stop: 83215, Start Num: 4
Candidate Starts for Omega_159:
(Start: 4 @82730 has 31 MA's), (5, 82769), (6, 82772), (7, 82841), (9, 82946), (10, 82970), (11, 83021), (12, 83030), (13, 83036), (15, 83087), (17, 83108), (19, 83144),

Gene: Optimus_146 Start: 80239, Stop: 80724, Start Num: 4
Candidate Starts for Optimus_146:
(Start: 4 @80239 has 31 MA's), (5, 80278), (6, 80281), (7, 80350), (9, 80455), (10, 80479), (11, 80530), (12, 80539), (13, 80545), (15, 80596), (17, 80617), (19, 80653),

Gene: Phoebus_154 Start: 83358, Stop: 83846, Start Num: 4
Candidate Starts for Phoebus_154:
(Start: 3 @83352 has 5 MA's), (Start: 4 @83358 has 31 MA's), (5, 83397), (6, 83400), (8, 83502), (9, 83586), (10, 83610), (11, 83661), (12, 83670), (14, 83691), (16, 83733), (18, 83754), (19, 83784),

Gene: Porcelain_148 Start: 77423, Stop: 77911, Start Num: 4
Candidate Starts for Porcelain_148:
(Start: 2 @77393 has 1 MA's), (Start: 4 @77423 has 31 MA's), (5, 77462), (6, 77465), (7, 77534), (9, 77639), (11, 77714), (14, 77744), (15, 77780), (19, 77837),

Gene: Pound_145 Start: 80476, Stop: 80964, Start Num: 4
Candidate Starts for Pound_145:
(Start: 3 @80470 has 5 MA's), (Start: 4 @80476 has 31 MA's), (5, 80515), (6, 80518), (8, 80620), (9, 80704), (10, 80728), (11, 80779), (12, 80788), (13, 80794), (14, 80809), (16, 80851), (18, 80872), (19, 80902),

Gene: Redno2_147 Start: 78542, Stop: 79030, Start Num: 4
Candidate Starts for Redno2_147:
(Start: 3 @78536 has 5 MA's), (Start: 4 @78542 has 31 MA's), (5, 78581), (6, 78584), (8, 78686), (9, 78770), (10, 78794), (11, 78845), (12, 78854), (14, 78875), (16, 78917), (18, 78938), (19, 78968),

Gene: Schatzie_149 Start: 81325, Stop: 81813, Start Num: 4
Candidate Starts for Schatzie_149:
(Start: 3 @81319 has 5 MA's), (Start: 4 @81325 has 31 MA's), (5, 81364), (6, 81367), (8, 81469), (9, 81553), (10, 81577), (11, 81628), (12, 81637), (14, 81658), (16, 81700), (18, 81721), (19, 81751),

Gene: Squint_144 Start: 77430, Stop: 77909, Start Num: 4
Candidate Starts for Squint_144:
(Start: 1 @77394 has 1 MA's), (Start: 4 @77430 has 31 MA's), (6, 77475), (8, 77565), (9, 77649), (10, 77673), (11, 77724), (12, 77733), (14, 77754), (16, 77796), (18, 77817), (19, 77847),

Gene: Superphikiman_149 Start: 77903, Stop: 78382, Start Num: 4
Candidate Starts for Superphikiman_149:
(Start: 1 @77867 has 1 MA's), (Start: 4 @77903 has 31 MA's), (6, 77948), (8, 78038), (9, 78122), (10, 78146), (11, 78197), (12, 78206), (14, 78227), (16, 78269), (18, 78290), (19, 78320),

Gene: Thibault_136 Start: 77991, Stop: 78479, Start Num: 4
Candidate Starts for Thibault_136:
(Start: 3 @77985 has 5 MA's), (Start: 4 @77991 has 31 MA's), (5, 78030), (6, 78033), (8, 78135), (9, 78219), (10, 78243), (11, 78294), (12, 78303), (14, 78324), (16, 78366), (18, 78387), (19, 78417),

Gene: ThreeRngTarjay_149 Start: 81949, Stop: 82437, Start Num: 4
Candidate Starts for ThreeRngTarjay_149:
(Start: 3 @81943 has 5 MA's), (Start: 4 @81949 has 31 MA's), (5, 81988), (6, 81991), (8, 82093), (9, 82177), (10, 82201), (11, 82252), (12, 82261), (14, 82282), (16, 82324), (18, 82345), (19, 82375),

Gene: Wanda_153 Start: 79418, Stop: 79912, Start Num: 3
Candidate Starts for Wanda_153:
(Start: 3 @79418 has 5 MA's), (Start: 4 @79424 has 31 MA's), (5, 79463), (6, 79466), (8, 79568), (9, 79652), (10, 79676), (11, 79727), (12, 79736), (14, 79757), (16, 79799), (18, 79820), (19, 79850),

Gene: Yeet_146 Start: 80486, Stop: 80974, Start Num: 4
Candidate Starts for Yeet_146:
(Start: 3 @80480 has 5 MA's), (Start: 4 @80486 has 31 MA's), (5, 80525), (6, 80528), (8, 80630), (9, 80714), (10, 80738), (11, 80789), (12, 80798), (14, 80819), (16, 80861), (18, 80882), (19, 80912),

Gene: Zelink_148 Start: 82266, Stop: 82754, Start Num: 4
Candidate Starts for Zelink_148:
(Start: 3 @82260 has 5 MA's), (Start: 4 @82266 has 31 MA's), (5, 82305), (6, 82308), (8, 82410), (9, 82494), (10, 82518), (11, 82569), (12, 82578), (14, 82599), (16, 82641), (18, 82662), (19, 82692),