

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 291299 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291299 has 43 members, 15 are drafts.

Phages represented in each track:

- Track 1 : BirdsNest_5
- Track 2 : Hashim76_6
- Track 3 : Zenteno07_6
- Track 4 : LittleMinkey_6
- Track 5 : Apex_94, Mudslide_94, JAMaL_94, Prince_93, Hydro_93, VioletZ_95, Austelle_93
- Track 6 : Mithril_91, JoyceMaria_92, Lolalove_95, BrownCNA_93, Hangman_93, Waleliano_92
- Track 7 : Fanaw_88
- Track 8 : GinPorsche_94, Hally898_90, Nanao_92, Poster_91, Lambano_90
- Track 9 : Frederick_94, Zemanar_91, Heath_87, BobbyK_93
- Track 10 : Renkei_92, LittleDigger_92, Antihero_92, Ahwei_90, Epah_92
- Track 11 : RawrgerThat_91
- Track 12 : Xincheng_85, JaguarMi_87
- Track 13 : Nigel_90
- Track 14 : Cooper_94
- Track 15 : Magpie_89
- Track 16 : Fortunato_90
- Track 17 : ChrisnMich_94
- Track 18 : QueenPie_86
- Track 19 : Stinger_90
- Track 20 : Quesadilla_93

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

The start number called the most often in the published annotations is 14, it was called in 25 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ahwei_90, Antihero_92, Apex_94, Austelle_93, BobbyK_93, BrownCNA_93, ChrisnMich_94, Cooper_94, Epah_92, Fanaw_88, Fortunato_90, Frederick_94, GinPorsche_94, Hally898_90, Hangman_93, Heath_87, Hydro_93, JAMaL_94, JaguarMi_87, JoyceMaria_92, Lambano_90, LittleDigger_92, Lolalove_95, Magpie_89, Mithril_91, Mudslide_94, Nanao_92, Nigel_90, Poster_91, Prince_93,

QueenPie_86, Quesadilla_93, RawrgerThat_91, Renkei_92, Stinger_90, VioletZ_95, Waleliano_92, Xincheng_85, Zemanar_91,

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:

- BirdsNest_5, Hashim76_6, LittleMinkey_6, Zenteno07_6,

Summary by start number:

Start 14:

- Found in 39 of 43 (90.7%) of genes in pham
- Manual Annotations of this start: 25 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ahwei_90 (B4), Antihero_92 (B4), Apex_94 (B4), Austelle_93 (B4), BobbyK_93 (B4), BrownCNA_93 (B4), ChrisnMich_94 (B4), Cooper_94 (B4), Epah_92 (B4), Fanaw_88 (B4), Fortunato_90 (B4), Frederick_94 (B4), GinPorsche_94 (B4), Hally898_90 (B4), Hangman_93 (B4), Heath_87 (B4), Hydro_93 (B4), JAMaL_94 (B4), JaguarMi_87 (B4), JoyceMaria_92 (B4), Lambano_90 (B4), LittleDigger_92 (B4), Lolalove_95 (B4), Magpie_89 (B4), Mithril_91 (B4), Mudslide_94 (B4), Nanao_92 (B4), Nigel_90 (B4), Poster_91 (B4), Prince_93 (B4), QueenPie_86 (B4), Quesadilla_93 (B9), RawrgerThat_91 (B4), Renkei_92 (B4), Stinger_90 (B4), VioletZ_95 (B4), Waleliano_92 (B4), Xincheng_85 (B4), Zemanar_91 (B4),

Start 15:

- Found in 15 of 43 (34.9%) of genes in pham
- Manual Annotations of this start: 3 of 28
- Called 26.7% of time when present
- Phage (with cluster) where this start called: BirdsNest_5 (B13), Hashim76_6 (B13), LittleMinkey_6 (B13), Zenteno07_6 (B13),

Summary by clusters:

There are 3 clusters represented in this pham: B4, B13, B9,

Info for manual annotations of cluster B13:

- Start number 15 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B4:

- Start number 14 was manually annotated 24 times for cluster B4.

Info for manual annotations of cluster B9:

- Start number 14 was manually annotated 1 time for cluster B9.

Gene Information:

Gene: Ahwei_90 Start: 68173, Stop: 68018, Start Num: 14

Candidate Starts for Ahwei_90:

(Start: 14 @68173 has 25 MA's), (Start: 15 @68167 has 3 MA's), (16, 68161), (17, 68158), (19, 68149), (21, 68140), (24, 68098), (25, 68089), (26, 68086), (30, 68059), (33, 68035), (34, 68032),

Gene: Antihero_92 Start: 68098, Stop: 67943, Start Num: 14

Candidate Starts for Antihero_92:

(Start: 14 @68098 has 25 MA's), (Start: 15 @68092 has 3 MA's), (16, 68086), (17, 68083), (19, 68074), (21, 68065), (24, 68023), (25, 68014), (26, 68011), (30, 67984), (33, 67960), (34, 67957),

Gene: Apex_94 Start: 69212, Stop: 69057, Start Num: 14

Candidate Starts for Apex_94:

(11, 69293), (Start: 14 @69212 has 25 MA's), (16, 69200), (19, 69188), (20, 69185), (21, 69179), (22, 69176), (26, 69125), (30, 69098), (32, 69083), (34, 69071),

Gene: Austelle_93 Start: 69744, Stop: 69589, Start Num: 14

Candidate Starts for Austelle_93:

(11, 69825), (Start: 14 @69744 has 25 MA's), (16, 69732), (19, 69720), (20, 69717), (21, 69711), (22, 69708), (26, 69657), (30, 69630), (32, 69615), (34, 69603),

Gene: BirdsNest_5 Start: 1077, Stop: 1232, Start Num: 15

Candidate Starts for BirdsNest_5:

(Start: 15 @1077 has 3 MA's), (27, 1173), (34, 1218),

Gene: BobbyK_93 Start: 68720, Stop: 68565, Start Num: 14

Candidate Starts for BobbyK_93:

(6, 68903), (9, 68825), (Start: 14 @68720 has 25 MA's), (18, 68699), (20, 68693), (23, 68675), (26, 68633), (27, 68624), (29, 68615), (32, 68591), (34, 68579),

Gene: BrownCNA_93 Start: 69159, Stop: 69004, Start Num: 14

Candidate Starts for BrownCNA_93:

(11, 69240), (Start: 14 @69159 has 25 MA's), (16, 69147), (19, 69135), (20, 69132), (21, 69126), (24, 69084), (26, 69072), (30, 69045), (32, 69030), (34, 69018),

Gene: ChrisnMich_94 Start: 67789, Stop: 67631, Start Num: 14

Candidate Starts for ChrisnMich_94:

(Start: 14 @67789 has 25 MA's), (Start: 15 @67783 has 3 MA's), (16, 67777), (17, 67774), (18, 67765), (24, 67711), (26, 67699), (27, 67690), (32, 67657), (34, 67645),

Gene: Cooper_94 Start: 68332, Stop: 68177, Start Num: 14

Candidate Starts for Cooper_94:

(12, 68362), (Start: 14 @68332 has 25 MA's), (17, 68317), (18, 68311), (24, 68257), (26, 68245), (27, 68236), (29, 68227), (32, 68203), (34, 68191),

Gene: Epah_92 Start: 68098, Stop: 67943, Start Num: 14

Candidate Starts for Epah_92:

(Start: 14 @68098 has 25 MA's), (Start: 15 @68092 has 3 MA's), (16, 68086), (17, 68083), (19, 68074), (21, 68065), (24, 68023), (25, 68014), (26, 68011), (30, 67984), (33, 67960), (34, 67957),

Gene: Fanaw_88 Start: 68764, Stop: 68609, Start Num: 14

Candidate Starts for Fanaw_88:

(11, 68845), (Start: 14 @68764 has 25 MA's), (16, 68752), (19, 68740), (20, 68737), (21, 68731), (22, 68728), (24, 68689), (25, 68680), (26, 68677), (30, 68650), (32, 68635), (34, 68623),

Gene: Fortunato_90 Start: 68521, Stop: 68366, Start Num: 14

Candidate Starts for Fortunato_90:

(Start: 14 @68521 has 25 MA's), (16, 68509), (19, 68497), (20, 68494), (21, 68488), (22, 68485), (26, 68434), (30, 68407), (32, 68392), (34, 68380),

Gene: Frederick_94 Start: 69026, Stop: 68871, Start Num: 14

Candidate Starts for Frederick_94:

(6, 69209), (9, 69131), (Start: 14 @69026 has 25 MA's), (18, 69005), (20, 68999), (23, 68981), (26, 68939), (27, 68930), (29, 68921), (32, 68897), (34, 68885),

Gene: GinPorsche_94 Start: 68095, Stop: 67940, Start Num: 14

Candidate Starts for GinPorsche_94:

(Start: 14 @68095 has 25 MA's), (Start: 15 @68089 has 3 MA's), (16, 68083), (17, 68080), (19, 68071), (21, 68062), (25, 68011), (26, 68008), (30, 67981), (33, 67957), (34, 67954),

Gene: Hally898_90 Start: 67935, Stop: 67780, Start Num: 14

Candidate Starts for Hally898_90:

(Start: 14 @67935 has 25 MA's), (Start: 15 @67929 has 3 MA's), (16, 67923), (17, 67920), (19, 67911), (21, 67902), (25, 67851), (26, 67848), (30, 67821), (33, 67797), (34, 67794),

Gene: Hangman_93 Start: 69321, Stop: 69166, Start Num: 14

Candidate Starts for Hangman_93:

(11, 69402), (Start: 14 @69321 has 25 MA's), (16, 69309), (19, 69297), (20, 69294), (21, 69288), (24, 69246), (26, 69234), (30, 69207), (32, 69192), (34, 69180),

Gene: Hashim76_6 Start: 1325, Stop: 1483, Start Num: 15

Candidate Starts for Hashim76_6:

(1, 692), (2, 977), (7, 1130), (Start: 15 @1325 has 3 MA's),

Gene: Heath_87 Start: 67091, Stop: 66936, Start Num: 14

Candidate Starts for Heath_87:

(6, 67274), (9, 67196), (Start: 14 @67091 has 25 MA's), (18, 67070), (20, 67064), (23, 67046), (26, 67004), (27, 66995), (29, 66986), (32, 66962), (34, 66950),

Gene: Hydro_93 Start: 69108, Stop: 68953, Start Num: 14

Candidate Starts for Hydro_93:

(11, 69189), (Start: 14 @69108 has 25 MA's), (16, 69096), (19, 69084), (20, 69081), (21, 69075), (22, 69072), (26, 69021), (30, 68994), (32, 68979), (34, 68967),

Gene: JAMaL_94 Start: 68808, Stop: 68653, Start Num: 14

Candidate Starts for JAMaL_94:

(11, 68889), (Start: 14 @68808 has 25 MA's), (16, 68796), (19, 68784), (20, 68781), (21, 68775), (22, 68772), (26, 68721), (30, 68694), (32, 68679), (34, 68667),

Gene: JaguarMi_87 Start: 69082, Stop: 68927, Start Num: 14

Candidate Starts for JaguarMi_87:

(Start: 14 @69082 has 25 MA's), (16, 69070), (19, 69058), (20, 69055), (21, 69049), (24, 69007), (25, 68998), (26, 68995), (30, 68968), (32, 68953), (34, 68941),

Gene: JoyceMaria_92 Start: 69153, Stop: 68998, Start Num: 14

Candidate Starts for JoyceMaria_92:

(11, 69234), (Start: 14 @69153 has 25 MA's), (16, 69141), (19, 69129), (20, 69126), (21, 69120), (24, 69078), (26, 69066), (30, 69039), (32, 69024), (34, 69012),

Gene: Lambano_90 Start: 67935, Stop: 67780, Start Num: 14

Candidate Starts for Lambano_90:

(Start: 14 @67935 has 25 MA's), (Start: 15 @67929 has 3 MA's), (16, 67923), (17, 67920), (19, 67911), (21, 67902), (25, 67851), (26, 67848), (30, 67821), (33, 67797), (34, 67794),

Gene: LittleDigger_92 Start: 68037, Stop: 67882, Start Num: 14

Candidate Starts for LittleDigger_92:

(Start: 14 @68037 has 25 MA's), (Start: 15 @68031 has 3 MA's), (16, 68025), (17, 68022), (19, 68013), (21, 68004), (24, 67962), (25, 67953), (26, 67950), (30, 67923), (33, 67899), (34, 67896),

Gene: LittleMinkey_6 Start: 1324, Stop: 1482, Start Num: 15

Candidate Starts for LittleMinkey_6:

(7, 1129), (Start: 15 @1324 has 3 MA's),

Gene: Lolalove_95 Start: 69056, Stop: 68901, Start Num: 14

Candidate Starts for Lolalove_95:

(11, 69137), (Start: 14 @69056 has 25 MA's), (16, 69044), (19, 69032), (20, 69029), (21, 69023), (24, 68981), (26, 68969), (30, 68942), (32, 68927), (34, 68915),

Gene: Magpie_89 Start: 68870, Stop: 68715, Start Num: 14

Candidate Starts for Magpie_89:

(Start: 14 @68870 has 25 MA's), (16, 68858), (17, 68855), (19, 68846), (21, 68837), (22, 68834), (26, 68783), (30, 68756), (32, 68741), (34, 68729),

Gene: Mithril_91 Start: 68882, Stop: 68727, Start Num: 14

Candidate Starts for Mithril_91:

(11, 68963), (Start: 14 @68882 has 25 MA's), (16, 68870), (19, 68858), (20, 68855), (21, 68849), (24, 68807), (26, 68795), (30, 68768), (32, 68753), (34, 68741),

Gene: Mudslide_94 Start: 69287, Stop: 69132, Start Num: 14

Candidate Starts for Mudslide_94:

(11, 69368), (Start: 14 @69287 has 25 MA's), (16, 69275), (19, 69263), (20, 69260), (21, 69254), (22, 69251), (26, 69200), (30, 69173), (32, 69158), (34, 69146),

Gene: Nanao_92 Start: 67948, Stop: 67793, Start Num: 14

Candidate Starts for Nanao_92:

(Start: 14 @67948 has 25 MA's), (Start: 15 @67942 has 3 MA's), (16, 67936), (17, 67933), (19, 67924), (21, 67915), (25, 67864), (26, 67861), (30, 67834), (33, 67810), (34, 67807),

Gene: Nigel_90 Start: 67578, Stop: 67423, Start Num: 14

Candidate Starts for Nigel_90:

(10, 67659), (Start: 14 @67578 has 25 MA's), (16, 67566), (20, 67551), (23, 67533), (27, 67482), (29, 67473), (33, 67440), (34, 67437),

Gene: Poster_91 Start: 67949, Stop: 67794, Start Num: 14

Candidate Starts for Poster_91:

(Start: 14 @67949 has 25 MA's), (Start: 15 @67943 has 3 MA's), (16, 67937), (17, 67934), (19, 67925), (21, 67916), (25, 67865), (26, 67862), (30, 67835), (33, 67811), (34, 67808),

Gene: Prince_93 Start: 69154, Stop: 68999, Start Num: 14

Candidate Starts for Prince_93:

(11, 69235), (Start: 14 @69154 has 25 MA's), (16, 69142), (19, 69130), (20, 69127), (21, 69121), (22, 69118), (26, 69067), (30, 69040), (32, 69025), (34, 69013),

Gene: QueenPie_86 Start: 67819, Stop: 67664, Start Num: 14

Candidate Starts for QueenPie_86:

(8, 67936), (9, 67924), (12, 67849), (Start: 14 @67819 has 25 MA's), (16, 67807), (18, 67798), (19, 67795), (20, 67792), (21, 67786), (22, 67783), (24, 67744), (26, 67732), (30, 67705), (32, 67690), (34, 67678),

Gene: Quesadilla_93 Start: 68486, Stop: 68325, Start Num: 14

Candidate Starts for Quesadilla_93:

(3, 68822), (4, 68816), (5, 68729), (Start: 14 @68486 has 25 MA's), (24, 68405), (28, 68381),

Gene: RawrgerThat_91 Start: 68652, Stop: 68497, Start Num: 14

Candidate Starts for RawrgerThat_91:

(Start: 14 @68652 has 25 MA's), (16, 68640), (19, 68628), (20, 68625), (21, 68619), (22, 68616), (26, 68565), (30, 68538), (32, 68523), (34, 68511),

Gene: Renkei_92 Start: 68031, Stop: 67876, Start Num: 14

Candidate Starts for Renkei_92:

(Start: 14 @68031 has 25 MA's), (Start: 15 @68025 has 3 MA's), (16, 68019), (17, 68016), (19, 68007), (21, 67998), (24, 67956), (25, 67947), (26, 67944), (30, 67917), (33, 67893), (34, 67890),

Gene: Stinger_90 Start: 67339, Stop: 67184, Start Num: 14

Candidate Starts for Stinger_90:

(12, 67369), (Start: 14 @67339 has 25 MA's), (17, 67324), (18, 67318), (23, 67294), (24, 67264), (26, 67252), (29, 67234), (34, 67198),

Gene: VioletZ_95 Start: 69261, Stop: 69106, Start Num: 14

Candidate Starts for VioletZ_95:

(11, 69342), (Start: 14 @69261 has 25 MA's), (16, 69249), (19, 69237), (20, 69234), (21, 69228), (22, 69225), (26, 69174), (30, 69147), (32, 69132), (34, 69120),

Gene: Waleliano_92 Start: 68908, Stop: 68753, Start Num: 14

Candidate Starts for Waleliano_92:

(11, 68989), (Start: 14 @68908 has 25 MA's), (16, 68896), (19, 68884), (20, 68881), (21, 68875), (24, 68833), (26, 68821), (30, 68794), (32, 68779), (34, 68767),

Gene: Xincheng_85 Start: 69024, Stop: 68869, Start Num: 14

Candidate Starts for Xincheng_85:

(Start: 14 @69024 has 25 MA's), (16, 69012), (19, 69000), (20, 68997), (21, 68991), (24, 68949), (25, 68940), (26, 68937), (30, 68910), (32, 68895), (34, 68883),

Gene: Zemanar_91 Start: 68925, Stop: 68770, Start Num: 14

Candidate Starts for Zemanar_91:

(6, 69108), (9, 69030), (Start: 14 @68925 has 25 MA's), (18, 68904), (20, 68898), (23, 68880), (26, 68838), (27, 68829), (29, 68820), (32, 68796), (34, 68784),

Gene: Zenteno07_6 Start: 1332, Stop: 1487, Start Num: 15

Candidate Starts for Zenteno07_6:

(13, 1296), (Start: 15 @1332 has 3 MA's), (17, 1344), (19, 1356), (21, 1365), (24, 1407), (28, 1431), (30, 1446), (31, 1452),