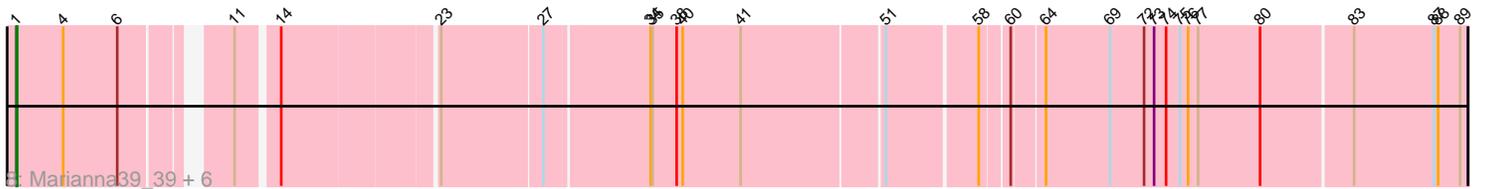
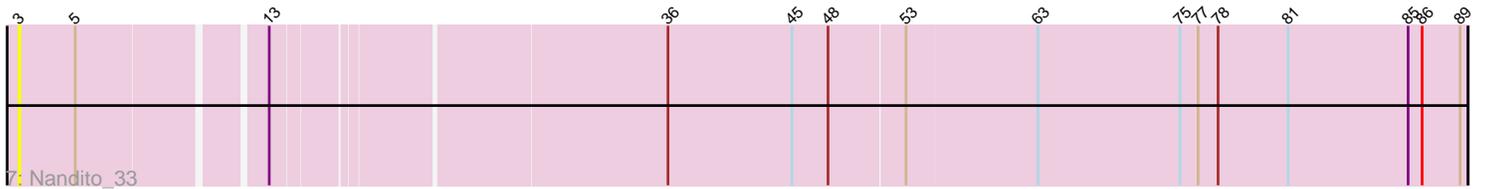
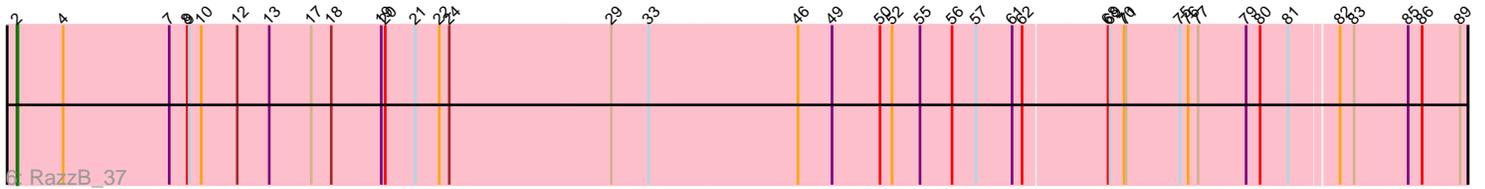
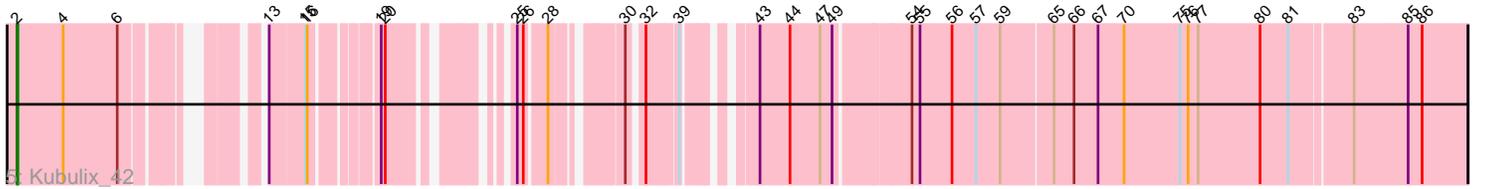
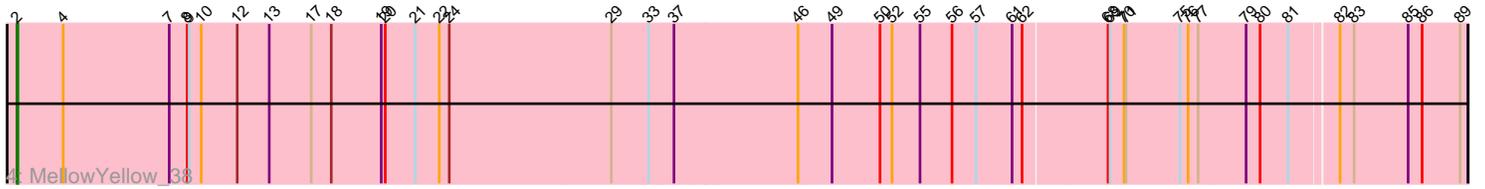
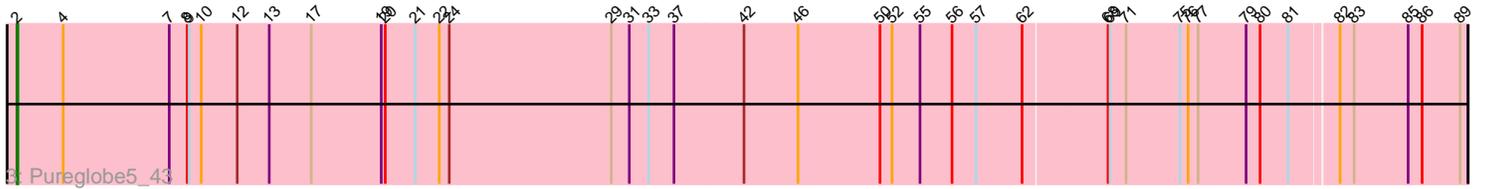
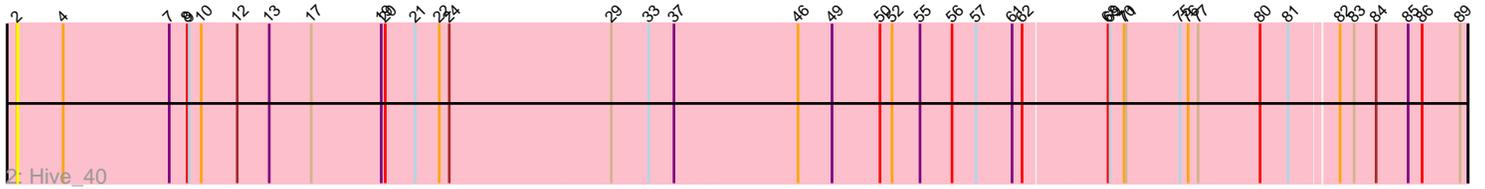
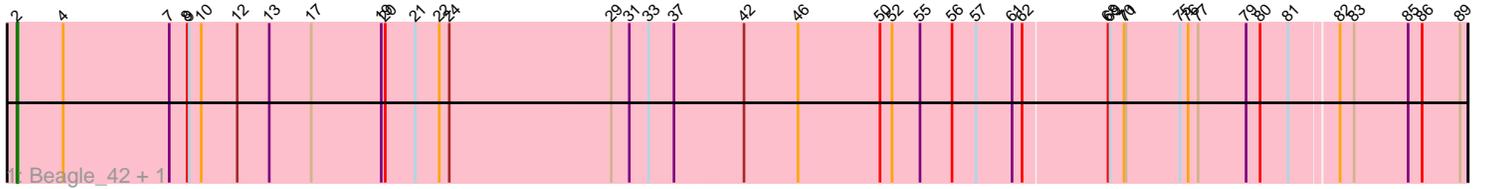


Pham 289846



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 289846 Report

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

Pham number 289846 has 15 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Beagle_42, Pointis_40
- Track 2 : Hive_40
- Track 3 : Pureglobe5_43
- Track 4 : MellowYellow_38
- Track 5 : Kubulix_42
- Track 6 : RazzB_37
- Track 7 : Nandito_33
- Track 8 : Marianna39_39, JeNeSaisPas_37, Elver_38, Kureo_39, Qui_38, Paella_38, Gandionco_39

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

The start number called the most often in the published annotations is 2, it was called in 6 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beagle_42, Hive_40, Kubulix_42, MellowYellow_38, Pointis_40, Pureglobe5_43, RazzB_37,

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

-

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

- Elver_38, Gandionco_39, JeNeSaisPas_37, Kureo_39, Marianna39_39, Nandito_33, Paella_38, Qui_38,

Summary by start number:

Start 1:

- Found in 7 of 15 (46.7%) of genes in pham
- Manual Annotations of this start: 3 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elver_38 (FK), Gandionco_39 (FK), JeNeSaisPas_37 (FK), Kureo_39 (FK), Marianna39_39 (FK), Paella_38 (FK), Qui_38

(FK),

Start 2:

- Found in 7 of 15 (46.7%) of genes in pham
- Manual Annotations of this start: 6 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beagle_42 (AP2), Hive_40 (AP2), Kubulix_42 (AP2), MellowYellow_38 (AP2), Pointis_40 (AP2), Pureglobe5_43 (AP2), RazzB_37 (AP2),

Start 3:

- Found in 1 of 15 (6.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nandito_33 (FH),

Summary by clusters:

There are 3 clusters represented in this pham: AP2, FH, FK,

Info for manual annotations of cluster AP2:

- Start number 2 was manually annotated 6 times for cluster AP2.

Info for manual annotations of cluster FK:

- Start number 1 was manually annotated 3 times for cluster FK.

Gene Information:

Gene: Beagle_42 Start: 30066, Stop: 32198, Start Num: 2

Candidate Starts for Beagle_42:

(Start: 2 @30066 has 6 MA's), (4, 30132), (7, 30291), (8, 30318), (9, 30321), (10, 30339), (12, 30393), (13, 30441), (17, 30504), (19, 30609), (20, 30615), (21, 30660), (22, 30696), (24, 30711), (29, 30951), (31, 30978), (33, 31005), (37, 31041), (42, 31140), (46, 31221), (50, 31341), (52, 31359), (55, 31401), (56, 31449), (57, 31485), (61, 31539), (62, 31554), (68, 31674), (69, 31677), (70, 31698), (71, 31701), (75, 31782), (76, 31794), (77, 31809), (79, 31878), (80, 31899), (81, 31941), (82, 32007), (83, 32028), (85, 32109), (86, 32130), (89, 32187),

Gene: Elver_38 Start: 26848, Stop: 28818, Start Num: 1

Candidate Starts for Elver_38:

(Start: 1 @26848 has 3 MA's), (4, 26914), (6, 26995), (11, 27121), (14, 27175), (23, 27388), (27, 27535), (34, 27682), (35, 27685), (38, 27718), (40, 27727), (41, 27808), (51, 28000), (58, 28123), (60, 28159), (64, 28201), (69, 28294), (72, 28345), (73, 28360), (74, 28378), (75, 28399), (76, 28411), (77, 28426), (80, 28519), (83, 28648), (87, 28768), (88, 28774), (89, 28807),

Gene: Gandionco_39 Start: 27370, Stop: 29340, Start Num: 1

Candidate Starts for Gandionco_39:

(Start: 1 @27370 has 3 MA's), (4, 27436), (6, 27517), (11, 27643), (14, 27697), (23, 27910), (27, 28057), (34, 28204), (35, 28207), (38, 28240), (40, 28249), (41, 28330), (51, 28522), (58, 28645), (60, 28681), (64, 28723), (69, 28816), (72, 28867), (73, 28882), (74, 28900), (75, 28921), (76, 28933), (77, 28948), (80, 29041), (83, 29170), (87, 29290), (88, 29296), (89, 29329),

Gene: Hive_40 Start: 30141, Stop: 32273, Start Num: 2

Candidate Starts for Hive_40:

(Start: 2 @30141 has 6 MA's), (4, 30207), (7, 30366), (8, 30393), (9, 30396), (10, 30414), (12, 30468), (13, 30516), (17, 30579), (19, 30684), (20, 30690), (21, 30735), (22, 30771), (24, 30786), (29, 31026), (33, 31080), (37, 31116), (46, 31296), (49, 31344), (50, 31416), (52, 31434), (55, 31476), (56, 31524), (57, 31560), (61, 31614), (62, 31629), (68, 31749), (69, 31752), (70, 31773), (71, 31776), (75, 31857), (76, 31869), (77, 31884), (80, 31974), (81, 32016), (82, 32082), (83, 32103), (84, 32136), (85, 32184), (86, 32205), (89, 32262),

Gene: JeNeSaisPas_37 Start: 27383, Stop: 29353, Start Num: 1

Candidate Starts for JeNeSaisPas_37:

(Start: 1 @27383 has 3 MA's), (4, 27449), (6, 27530), (11, 27656), (14, 27710), (23, 27923), (27, 28070), (34, 28217), (35, 28220), (38, 28253), (40, 28262), (41, 28343), (51, 28535), (58, 28658), (60, 28694), (64, 28736), (69, 28829), (72, 28880), (73, 28895), (74, 28913), (75, 28934), (76, 28946), (77, 28961), (80, 29054), (83, 29183), (87, 29303), (88, 29309), (89, 29342),

Gene: Kubulix_42 Start: 30256, Stop: 32040, Start Num: 2

Candidate Starts for Kubulix_42:

(Start: 2 @30256 has 6 MA's), (4, 30322), (6, 30403), (13, 30538), (15, 30583), (16, 30586), (19, 30661), (20, 30667), (25, 30790), (26, 30799), (28, 30826), (30, 30904), (32, 30919), (39, 30961), (43, 31030), (44, 31075), (47, 31117), (49, 31132), (54, 31237), (55, 31249), (56, 31297), (57, 31333), (59, 31369), (65, 31444), (66, 31471), (67, 31507), (70, 31546), (75, 31630), (76, 31642), (77, 31657), (80, 31747), (81, 31789), (83, 31876), (85, 31951), (86, 31972),

Gene: Kureo_39 Start: 26193, Stop: 28163, Start Num: 1

Candidate Starts for Kureo_39:

(Start: 1 @26193 has 3 MA's), (4, 26259), (6, 26340), (11, 26466), (14, 26520), (23, 26733), (27, 26880), (34, 27027), (35, 27030), (38, 27063), (40, 27072), (41, 27153), (51, 27345), (58, 27468), (60, 27504), (64, 27546), (69, 27639), (72, 27690), (73, 27705), (74, 27723), (75, 27744), (76, 27756), (77, 27771), (80, 27864), (83, 27993), (87, 28113), (88, 28119), (89, 28152),

Gene: Marianna39_39 Start: 27370, Stop: 29340, Start Num: 1

Candidate Starts for Marianna39_39:

(Start: 1 @27370 has 3 MA's), (4, 27436), (6, 27517), (11, 27643), (14, 27697), (23, 27910), (27, 28057), (34, 28204), (35, 28207), (38, 28240), (40, 28249), (41, 28330), (51, 28522), (58, 28645), (60, 28681), (64, 28723), (69, 28816), (72, 28867), (73, 28882), (74, 28900), (75, 28921), (76, 28933), (77, 28948), (80, 29041), (83, 29170), (87, 29290), (88, 29296), (89, 29329),

Gene: MellowYellow_38 Start: 28801, Stop: 30933, Start Num: 2

Candidate Starts for MellowYellow_38:

(Start: 2 @28801 has 6 MA's), (4, 28867), (7, 29026), (8, 29053), (9, 29056), (10, 29074), (12, 29128), (13, 29176), (17, 29239), (18, 29269), (19, 29344), (20, 29350), (21, 29395), (22, 29431), (24, 29446), (29, 29686), (33, 29740), (37, 29776), (46, 29956), (49, 30004), (50, 30076), (52, 30094), (55, 30136), (56, 30184), (57, 30220), (61, 30274), (62, 30289), (68, 30409), (69, 30412), (70, 30433), (71, 30436), (75, 30517), (76, 30529), (77, 30544), (79, 30613), (80, 30634), (81, 30676), (82, 30742), (83, 30763), (85, 30844), (86, 30865), (89, 30922),

Gene: Nandito_33 Start: 25294, Stop: 27339, Start Num: 3

Candidate Starts for Nandito_33:

(3, 25294), (5, 25378), (13, 25627), (36, 26173), (45, 26359), (48, 26413), (53, 26524), (63, 26716), (75, 26920), (77, 26947), (78, 26974), (81, 27079), (85, 27250), (86, 27271), (89, 27328),

Gene: Paella_38 Start: 26850, Stop: 28820, Start Num: 1

Candidate Starts for Paella_38:

(Start: 1 @26850 has 3 MA's), (4, 26916), (6, 26997), (11, 27123), (14, 27177), (23, 27390), (27, 27537), (34, 27684), (35, 27687), (38, 27720), (40, 27729), (41, 27810), (51, 28002), (58, 28125), (60, 28161), (64, 28203), (69, 28296), (72, 28347), (73, 28362), (74, 28380), (75, 28401), (76, 28413), (77, 28428), (80, 28521), (83, 28650), (87, 28770), (88, 28776), (89, 28809),

Gene: Pointis_40 Start: 30083, Stop: 32215, Start Num: 2

Candidate Starts for Pointis_40:

(Start: 2 @30083 has 6 MA's), (4, 30149), (7, 30308), (8, 30335), (9, 30338), (10, 30356), (12, 30410), (13, 30458), (17, 30521), (19, 30626), (20, 30632), (21, 30677), (22, 30713), (24, 30728), (29, 30968), (31, 30995), (33, 31022), (37, 31058), (42, 31157), (46, 31238), (50, 31358), (52, 31376), (55, 31418), (56, 31466), (57, 31502), (61, 31556), (62, 31571), (68, 31691), (69, 31694), (70, 31715), (71, 31718), (75, 31799), (76, 31811), (77, 31826), (79, 31895), (80, 31916), (81, 31958), (82, 32024), (83, 32045), (85, 32126), (86, 32147), (89, 32204),

Gene: Pureglobe5_43 Start: 30266, Stop: 32398, Start Num: 2

Candidate Starts for Pureglobe5_43:

(Start: 2 @30266 has 6 MA's), (4, 30332), (7, 30491), (8, 30518), (9, 30521), (10, 30539), (12, 30593), (13, 30641), (17, 30704), (19, 30809), (20, 30815), (21, 30860), (22, 30896), (24, 30911), (29, 31151), (31, 31178), (33, 31205), (37, 31241), (42, 31340), (46, 31421), (50, 31541), (52, 31559), (55, 31601), (56, 31649), (57, 31685), (62, 31754), (68, 31874), (69, 31877), (71, 31901), (75, 31982), (76, 31994), (77, 32009), (79, 32078), (80, 32099), (81, 32141), (82, 32207), (83, 32228), (85, 32309), (86, 32330), (89, 32387),

Gene: Qui_38 Start: 26850, Stop: 28820, Start Num: 1

Candidate Starts for Qui_38:

(Start: 1 @26850 has 3 MA's), (4, 26916), (6, 26997), (11, 27123), (14, 27177), (23, 27390), (27, 27537), (34, 27684), (35, 27687), (38, 27720), (40, 27729), (41, 27810), (51, 28002), (58, 28125), (60, 28161), (64, 28203), (69, 28296), (72, 28347), (73, 28362), (74, 28380), (75, 28401), (76, 28413), (77, 28428), (80, 28521), (83, 28650), (87, 28770), (88, 28776), (89, 28809),

Gene: RazzB_37 Start: 28547, Stop: 30679, Start Num: 2

Candidate Starts for RazzB_37:

(Start: 2 @28547 has 6 MA's), (4, 28613), (7, 28772), (8, 28799), (9, 28802), (10, 28820), (12, 28874), (13, 28922), (17, 28985), (18, 29015), (19, 29090), (20, 29096), (21, 29141), (22, 29177), (24, 29192), (29, 29432), (33, 29486), (46, 29702), (49, 29750), (50, 29822), (52, 29840), (55, 29882), (56, 29930), (57, 29966), (61, 30020), (62, 30035), (68, 30155), (69, 30158), (70, 30179), (71, 30182), (75, 30263), (76, 30275), (77, 30290), (79, 30359), (80, 30380), (81, 30422), (82, 30488), (83, 30509), (85, 30590), (86, 30611), (89, 30668),