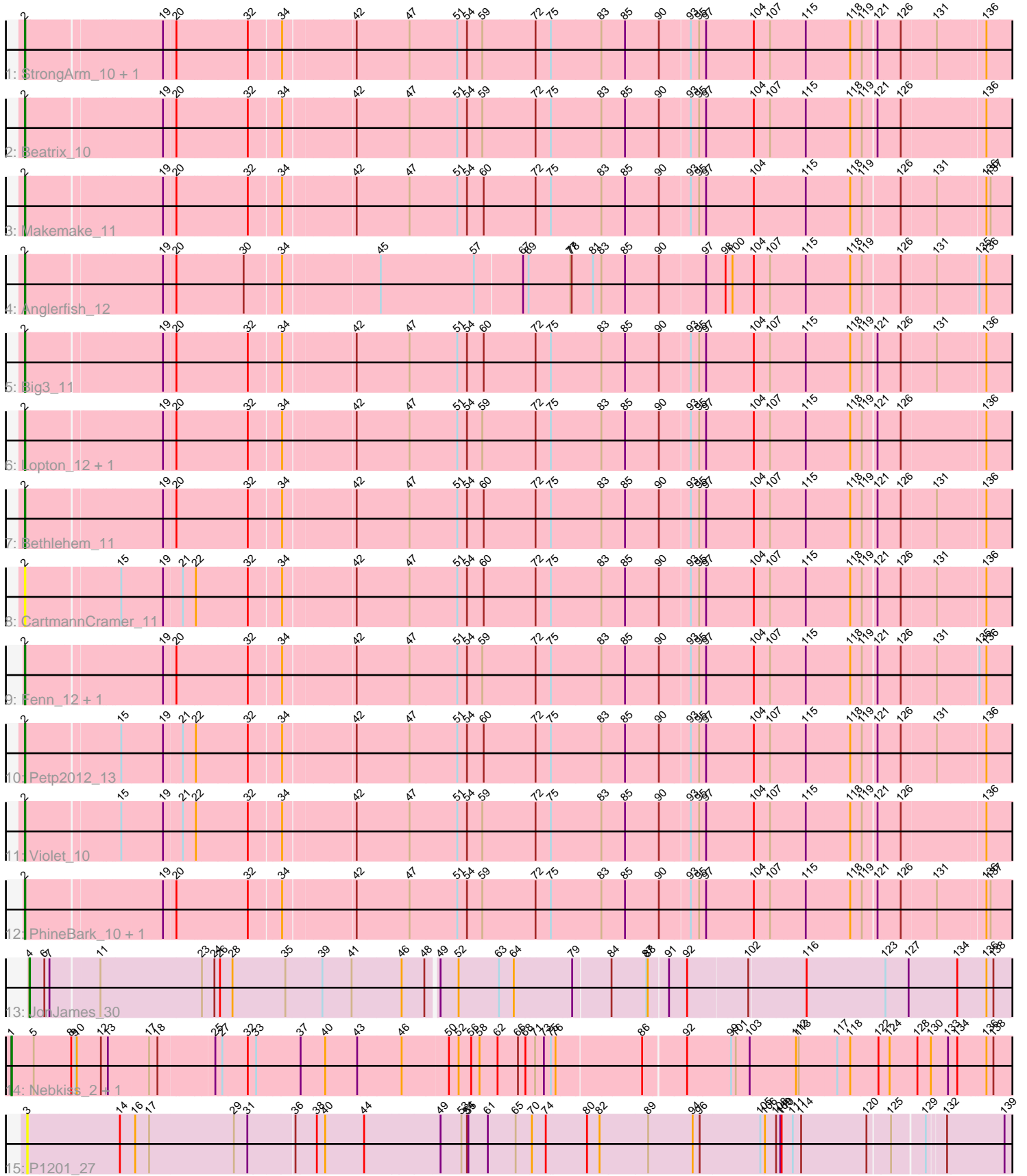


Zoomed Pham 309325



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 309325 Report

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

Pham number 309325 has 20 members, 3 are drafts.

Phages represented in each track:

- Track 1 : StrongArm_10, Bexan_10
- Track 2 : Beatrix_10
- Track 3 : Makemake_11
- Track 4 : Anglerfish_12
- Track 5 : Big3_11
- Track 6 : Lopton_12, Phlippers_10
- Track 7 : Bethlehem_11
- Track 8 : CartmannCramer_11
- Track 9 : Fenn_12, Naira_12
- Track 10 : Petp2012_13
- Track 11 : Violet_10
- Track 12 : PhineBark_10, Levia_11
- Track 13 : JonJames_30
- Track 14 : Nebkiss_2, Gaia_2
- Track 15 : P1201_27

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 14 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anglerfish_12, Beatrix_10, Bethlehem_11, Bexan_10, Big3_11, CartmannCramer_11, Fenn_12, Levia_11, Lopton_12, Makemake_11, Naira_12, Petp2012_13, PhineBark_10, Phlippers_10, StrongArm_10, Violet_10,

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

-

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

- Gaia_2, JonJames_30, Nebkiss_2, P1201_27,

Summary by start number:

Start 1:

- Found in 2 of 20 (10.0%) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia_2 (X), Nebkiss_2 (X),

Start 2:

- Found in 16 of 20 (80.0%) of genes in pham
- Manual Annotations of this start: 14 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anglerfish_12 (A1), Beatrix_10 (A1), Bethlehem_11 (A1), Bexan_10 (A1), Big3_11 (A1), CartmannCramer_11 (A1), Fenn_12 (A1), Levia_11 (A1), Lopton_12 (A1), Makemake_11 (A1), Naira_12 (A1), Petp2012_13 (A1), PhineBark_10 (A1), Phlippers_10 (A1), StrongArm_10 (A1), Violet_10 (A1),

Start 3:

- Found in 1 of 20 (5.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: P1201_27 (singleton),

Start 4:

- Found in 1 of 20 (5.0%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames_30 (DD),

Summary by clusters:

There are 4 clusters represented in this pham: A1, X, DD, singleton,

Info for manual annotations of cluster A1:

- Start number 2 was manually annotated 14 times for cluster A1.

Info for manual annotations of cluster DD:

- Start number 4 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster X:

- Start number 1 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Anglerfish_12 Start: 6959, Stop: 9664, Start Num: 2

Candidate Starts for Anglerfish_12:

(Start: 2 @6959 has 14 MA's), (19, 7223), (20, 7247), (30, 7382), (34, 7454), (45, 7643), (57, 7841), (67, 7937), (69, 7949), (77, 8039), (78, 8042), (81, 8087), (83, 8105), (85, 8156), (90, 8228), (97, 8324), (98, 8366), (100, 8381), (104, 8426), (107, 8459), (115, 8534), (118, 8624), (119, 8648), (126, 8723), (131, 8792), (135, 8867), (136, 8879), (141, 8939), (151, 9164), (152, 9173), (153, 9185), (157, 9227), (159, 9248), (162, 9275), (171, 9383), (173, 9473), (180, 9578),

Gene: Beatrix_10 Start: 6674, Stop: 9385, Start Num: 2

Candidate Starts for Beatrix_10:

(Start: 2 @6674 has 14 MA's), (19, 6938), (20, 6962), (32, 7103), (34, 7169), (42, 7307), (47, 7418), (51, 7520), (54, 7541), (59, 7574), (72, 7685), (75, 7718), (83, 7826), (85, 7877), (90, 7949), (93, 8012), (95, 8030), (97, 8045), (104, 8147), (107, 8180), (115, 8255), (118, 8345), (119, 8369), (121, 8396), (126, 8444), (136, 8600), (141, 8660), (152, 8894), (153, 8906), (157, 8948), (159, 8969), (162, 8996), (171, 9104), (173, 9194), (180, 9299),

Gene: Bethlehem_11 Start: 7260, Stop: 9971, Start Num: 2

Candidate Starts for Bethlehem_11:

(Start: 2 @7260 has 14 MA's), (19, 7524), (20, 7548), (32, 7689), (34, 7755), (42, 7893), (47, 8004), (51, 8106), (54, 8127), (60, 8163), (72, 8271), (75, 8304), (83, 8412), (85, 8463), (90, 8535), (93, 8598), (95, 8616), (97, 8631), (104, 8733), (107, 8766), (115, 8841), (118, 8931), (119, 8955), (121, 8982), (126, 9030), (131, 9099), (136, 9186), (141, 9246), (151, 9471), (152, 9480), (153, 9492), (157, 9534), (159, 9555), (162, 9582), (171, 9690), (173, 9780), (180, 9885),

Gene: Bexan_10 Start: 6674, Stop: 9385, Start Num: 2

Candidate Starts for Bexan_10:

(Start: 2 @6674 has 14 MA's), (19, 6938), (20, 6962), (32, 7103), (34, 7169), (42, 7307), (47, 7418), (51, 7520), (54, 7541), (59, 7574), (72, 7685), (75, 7718), (83, 7826), (85, 7877), (90, 7949), (93, 8012), (95, 8030), (97, 8045), (104, 8147), (107, 8180), (115, 8255), (118, 8345), (119, 8369), (121, 8396), (126, 8444), (131, 8513), (136, 8600), (141, 8660), (151, 8885), (152, 8894), (153, 8906), (157, 8948), (159, 8969), (162, 8996), (171, 9104), (173, 9194), (180, 9299),

Gene: Big3_11 Start: 6617, Stop: 9328, Start Num: 2

Candidate Starts for Big3_11:

(Start: 2 @6617 has 14 MA's), (19, 6881), (20, 6905), (32, 7046), (34, 7112), (42, 7250), (47, 7361), (51, 7463), (54, 7484), (60, 7520), (72, 7628), (75, 7661), (83, 7769), (85, 7820), (90, 7892), (93, 7955), (95, 7973), (97, 7988), (104, 8090), (107, 8123), (115, 8198), (118, 8288), (119, 8312), (121, 8339), (126, 8387), (131, 8456), (136, 8543), (141, 8603), (152, 8837), (153, 8849), (157, 8891), (159, 8912), (162, 8939), (171, 9047), (173, 9137), (180, 9242),

Gene: CartmannCramer_11 Start: 7522, Stop: 10233, Start Num: 2

Candidate Starts for CartmannCramer_11:

(Start: 2 @7522 has 14 MA's), (15, 7702), (19, 7786), (21, 7822), (22, 7849), (32, 7951), (34, 8017), (42, 8155), (47, 8266), (51, 8368), (54, 8389), (60, 8425), (72, 8533), (75, 8566), (83, 8674), (85, 8725), (90, 8797), (93, 8860), (95, 8878), (97, 8893), (104, 8995), (107, 9028), (115, 9103), (118, 9193), (119, 9217), (121, 9244), (126, 9292), (131, 9361), (136, 9448), (141, 9508), (152, 9742), (153, 9754), (157, 9796), (159, 9817), (162, 9844), (171, 9952), (173, 10042), (180, 10147),

Gene: Fenn_12 Start: 7287, Stop: 9998, Start Num: 2

Candidate Starts for Fenn_12:

(Start: 2 @7287 has 14 MA's), (19, 7551), (20, 7575), (32, 7716), (34, 7782), (42, 7920), (47, 8031), (51, 8133), (54, 8154), (59, 8187), (72, 8298), (75, 8331), (83, 8439), (85, 8490), (90, 8562), (93, 8625), (95, 8643), (97, 8658), (104, 8760), (107, 8793), (115, 8868), (118, 8958), (119, 8982), (121, 9009), (126, 9057), (131, 9126), (135, 9201), (136, 9213), (141, 9273), (152, 9507), (153, 9519), (157, 9561), (159, 9582), (162, 9609), (171, 9717), (173, 9807), (180, 9912),

Gene: Gaia_2 Start: 559, Stop: 3372, Start Num: 1

Candidate Starts for Gaia_2:

(Start: 1 @559 has 2 MA's), (5, 607), (8, 688), (9, 697), (10, 700), (12, 748), (13, 760), (17, 844), (18, 859), (25, 970), (27, 982), (32, 1033), (33, 1051), (37, 1141), (40, 1192), (43, 1258), (46, 1351), (50, 1444), (52, 1465), (56, 1492), (58, 1510), (62, 1549), (66, 1591), (68, 1606), (71, 1627), (73, 1645), (75,

1657), (76, 1666), (86, 1840), (92, 1927), (99, 2017), (101, 2026), (103, 2056), (112, 2149), (113, 2155), (117, 2233), (118, 2260), (122, 2320), (124, 2344), (128, 2404), (130, 2431), (133, 2467), (134, 2485), (136, 2542), (138, 2557), (142, 2614), (144, 2701), (147, 2779), (148, 2785), (154, 2884), (155, 2887), (159, 2938), (163, 2989), (164, 2995), (165, 3031), (168, 3043), (170, 3076), (171, 3082), (172, 3154), (174, 3178), (175, 3184), (176, 3190), (178, 3232), (180, 3277), (181, 3283), (182, 3298), (183, 3313), (185, 3358),

Gene: JonJames_30 Start: 11893, Stop: 14622, Start Num: 4

Candidate Starts for JonJames_30:

(Start: 4 @11893 has 1 MA's), (6, 11923), (7, 11929), (11, 12025), (23, 12238), (24, 12265), (26, 12277), (28, 12301), (35, 12415), (39, 12490), (41, 12553), (46, 12655), (48, 12700), (49, 12721), (52, 12760), (63, 12847), (64, 12877), (79, 12994), (84, 13072), (87, 13144), (88, 13147), (91, 13186), (92, 13225), (102, 13348), (116, 13459), (123, 13621), (127, 13669), (134, 13771), (136, 13831), (138, 13846), (145, 14011), (149, 14089), (156, 14170), (158, 14191), (160, 14218), (166, 14293), (171, 14335), (181, 14536), (183, 14569),

Gene: Levia_11 Start: 6763, Stop: 9474, Start Num: 2

Candidate Starts for Levia_11:

(Start: 2 @6763 has 14 MA's), (19, 7027), (20, 7051), (32, 7192), (34, 7258), (42, 7396), (47, 7507), (51, 7609), (54, 7630), (59, 7663), (72, 7774), (75, 7807), (83, 7915), (85, 7966), (90, 8038), (93, 8101), (95, 8119), (97, 8134), (104, 8236), (107, 8269), (115, 8344), (118, 8434), (119, 8458), (121, 8485), (126, 8533), (131, 8602), (136, 8689), (137, 8698), (140, 8746), (141, 8749), (152, 8983), (153, 8995), (157, 9037), (159, 9058), (162, 9085), (171, 9193), (173, 9283), (180, 9388),

Gene: Lopton_12 Start: 7342, Stop: 10053, Start Num: 2

Candidate Starts for Lopton_12:

(Start: 2 @7342 has 14 MA's), (19, 7606), (20, 7630), (32, 7771), (34, 7837), (42, 7975), (47, 8086), (51, 8188), (54, 8209), (59, 8242), (72, 8353), (75, 8386), (83, 8494), (85, 8545), (90, 8617), (93, 8680), (95, 8698), (97, 8713), (104, 8815), (107, 8848), (115, 8923), (118, 9013), (119, 9037), (121, 9064), (126, 9112), (136, 9268), (141, 9328), (151, 9553), (152, 9562), (153, 9574), (157, 9616), (159, 9637), (162, 9664), (171, 9772), (173, 9862), (180, 9967),

Gene: Makemake_11 Start: 7184, Stop: 9895, Start Num: 2

Candidate Starts for Makemake_11:

(Start: 2 @7184 has 14 MA's), (19, 7448), (20, 7472), (32, 7613), (34, 7679), (42, 7817), (47, 7928), (51, 8030), (54, 8051), (60, 8087), (72, 8195), (75, 8228), (83, 8336), (85, 8387), (90, 8459), (93, 8522), (95, 8540), (97, 8555), (104, 8657), (115, 8765), (118, 8855), (119, 8879), (126, 8954), (131, 9023), (136, 9110), (137, 9119), (141, 9170), (152, 9404), (153, 9416), (157, 9458), (159, 9479), (162, 9506), (171, 9614), (173, 9704), (180, 9809),

Gene: Naira_12 Start: 7287, Stop: 9998, Start Num: 2

Candidate Starts for Naira_12:

(Start: 2 @7287 has 14 MA's), (19, 7551), (20, 7575), (32, 7716), (34, 7782), (42, 7920), (47, 8031), (51, 8133), (54, 8154), (59, 8187), (72, 8298), (75, 8331), (83, 8439), (85, 8490), (90, 8562), (93, 8625), (95, 8643), (97, 8658), (104, 8760), (107, 8793), (115, 8868), (118, 8958), (119, 8982), (121, 9009), (126, 9057), (131, 9126), (135, 9201), (136, 9213), (141, 9273), (152, 9507), (153, 9519), (157, 9561), (159, 9582), (162, 9609), (171, 9717), (173, 9807), (180, 9912),

Gene: Nebkiss_2 Start: 560, Stop: 3373, Start Num: 1

Candidate Starts for Nebkiss_2:

(Start: 1 @560 has 2 MA's), (5, 608), (8, 689), (9, 698), (10, 701), (12, 749), (13, 761), (17, 845), (18, 860), (25, 971), (27, 983), (32, 1034), (33, 1052), (37, 1142), (40, 1193), (43, 1259), (46, 1352), (50, 1445), (52, 1466), (56, 1493), (58, 1511), (62, 1550), (66, 1592), (68, 1607), (71, 1628), (73, 1646), (75,

1658), (76, 1667), (86, 1841), (92, 1928), (99, 2018), (101, 2027), (103, 2057), (112, 2150), (113, 2156), (117, 2234), (118, 2261), (122, 2321), (124, 2345), (128, 2405), (130, 2432), (133, 2468), (134, 2486), (136, 2543), (138, 2558), (142, 2615), (144, 2702), (147, 2780), (148, 2786), (154, 2885), (155, 2888), (159, 2939), (163, 2990), (164, 2996), (165, 3032), (168, 3044), (170, 3077), (171, 3083), (172, 3155), (174, 3179), (175, 3185), (176, 3191), (178, 3233), (180, 3278), (181, 3284), (182, 3299), (183, 3314), (185, 3359),

Gene: P1201_27 Start: 12800, Stop: 15562, Start Num: 3

Candidate Starts for P1201_27:

(3, 12800), (14, 12992), (16, 13025), (17, 13055), (29, 13235), (31, 13262), (36, 13355), (38, 13400), (40, 13418), (44, 13502), (49, 13661), (53, 13706), (54, 13718), (55, 13721), (61, 13763), (65, 13823), (70, 13856), (74, 13886), (80, 13973), (82, 14000), (89, 14102), (94, 14198), (96, 14213), (105, 14342), (106, 14351), (108, 14375), (109, 14384), (110, 14387), (111, 14411), (114, 14429), (120, 14570), (125, 14615), (129, 14681), (132, 14717), (139, 14840), (143, 14891), (146, 14993), (150, 15044), (161, 15182), (167, 15248), (169, 15281), (176, 15386), (177, 15419), (179, 15437), (180, 15467), (184, 15512),

Gene: Petp2012_13 Start: 6923, Stop: 9634, Start Num: 2

Candidate Starts for Petp2012_13:

(Start: 2 @6923 has 14 MA's), (15, 7103), (19, 7187), (21, 7223), (22, 7250), (32, 7352), (34, 7418), (42, 7556), (47, 7667), (51, 7769), (54, 7790), (60, 7826), (72, 7934), (75, 7967), (83, 8075), (85, 8126), (90, 8198), (93, 8261), (95, 8279), (97, 8294), (104, 8396), (107, 8429), (115, 8504), (118, 8594), (119, 8618), (121, 8645), (126, 8693), (131, 8762), (136, 8849), (141, 8909), (151, 9134), (152, 9143), (153, 9155), (157, 9197), (159, 9218), (162, 9245), (171, 9353), (173, 9443), (180, 9548),

Gene: PhineBark_10 Start: 6763, Stop: 9474, Start Num: 2

Candidate Starts for PhineBark_10:

(Start: 2 @6763 has 14 MA's), (19, 7027), (20, 7051), (32, 7192), (34, 7258), (42, 7396), (47, 7507), (51, 7609), (54, 7630), (59, 7663), (72, 7774), (75, 7807), (83, 7915), (85, 7966), (90, 8038), (93, 8101), (95, 8119), (97, 8134), (104, 8236), (107, 8269), (115, 8344), (118, 8434), (119, 8458), (121, 8485), (126, 8533), (131, 8602), (136, 8689), (137, 8698), (140, 8746), (141, 8749), (152, 8983), (153, 8995), (157, 9037), (159, 9058), (162, 9085), (171, 9193), (173, 9283), (180, 9388),

Gene: Phlippers_10 Start: 6948, Stop: 9659, Start Num: 2

Candidate Starts for Phlippers_10:

(Start: 2 @6948 has 14 MA's), (19, 7212), (20, 7236), (32, 7377), (34, 7443), (42, 7581), (47, 7692), (51, 7794), (54, 7815), (59, 7848), (72, 7959), (75, 7992), (83, 8100), (85, 8151), (90, 8223), (93, 8286), (95, 8304), (97, 8319), (104, 8421), (107, 8454), (115, 8529), (118, 8619), (119, 8643), (121, 8670), (126, 8718), (136, 8874), (141, 8934), (151, 9159), (152, 9168), (153, 9180), (157, 9222), (159, 9243), (162, 9270), (171, 9378), (173, 9468), (180, 9573),

Gene: StrongArm_10 Start: 6674, Stop: 9385, Start Num: 2

Candidate Starts for StrongArm_10:

(Start: 2 @6674 has 14 MA's), (19, 6938), (20, 6962), (32, 7103), (34, 7169), (42, 7307), (47, 7418), (51, 7520), (54, 7541), (59, 7574), (72, 7685), (75, 7718), (83, 7826), (85, 7877), (90, 7949), (93, 8012), (95, 8030), (97, 8045), (104, 8147), (107, 8180), (115, 8255), (118, 8345), (119, 8369), (121, 8396), (126, 8444), (131, 8513), (136, 8600), (141, 8660), (151, 8885), (152, 8894), (153, 8906), (157, 8948), (159, 8969), (162, 8996), (171, 9104), (173, 9194), (180, 9299),

Gene: Violet_10 Start: 6546, Stop: 9257, Start Num: 2

Candidate Starts for Violet_10:

(Start: 2 @6546 has 14 MA's), (15, 6726), (19, 6810), (21, 6846), (22, 6873), (32, 6975), (34, 7041), (42, 7179), (47, 7290), (51, 7392), (54, 7413), (59, 7446), (72, 7557), (75, 7590), (83, 7698), (85, 7749),

(90, 7821), (93, 7884), (95, 7902), (97, 7917), (104, 8019), (107, 8052), (115, 8127), (118, 8217), (119, 8241), (121, 8268), (126, 8316), (136, 8472), (141, 8532), (151, 8757), (152, 8766), (153, 8778), (157, 8820), (159, 8841), (162, 8868), (171, 8976), (173, 9066), (180, 9171),