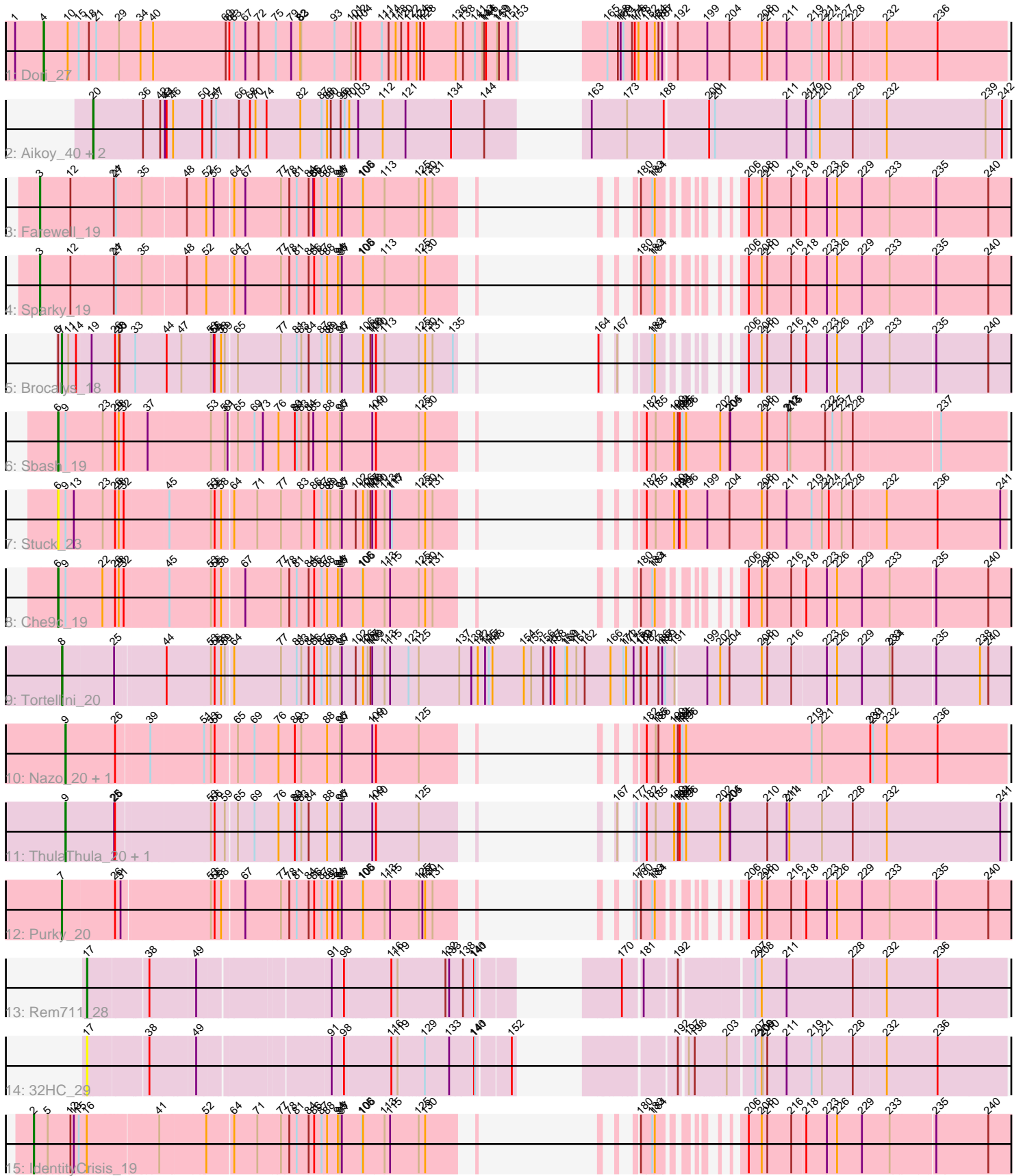


Pham 216593



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 216593 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216593 has 19 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Dori_27
- Track 2 : Aikoy_40, Leopard_40, Onyinye_41
- Track 3 : Farewell_19
- Track 4 : Sparky_19
- Track 5 : Brocalys_18
- Track 6 : Sbash_19
- Track 7 : Stuck_23
- Track 8 : Che9c_19
- Track 9 : Tortellini_20
- Track 10 : Nazo_20, BigNuz_20
- Track 11 : ThulaThula_20, Phayonce_20
- Track 12 : Purky_20
- Track 13 : Rem711_28
- Track 14 : 32HC_29
- Track 15 : IdentityCrisis_19

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

The start number called the most often in the published annotations is 9, it was called in 4 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BigNuz_20, Nazo_20, Phayonce_20, ThulaThula_20,

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

- Che9c_19, Sbash_19, Stuck_23,

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

- 32HC_29, Aikoy_40, Brocalys_18, Dori_27, Farewell_19, IdentityCrisis_19, Leopard_40, Onyinye_41, Purky_20, Rem711_28, Sparky_19, Tortellini_20,

Summary by start number:

Start 2:

- Found in 1 of 19 (5.3%) 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: IdentityCrisis_19 (singleton),

Start 3:

- Found in 2 of 19 (10.5%) 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: Farewell_19 (AF), Sparky_19 (AF),

Start 4:

- Found in 1 of 19 (5.3%) 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: Dori_27 (AD),

Start 6:

- Found in 4 of 19 (21.1%) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Che9c_19 (I2), Sbash_19 (I2), Stuck_23 (I2),

Start 7:

- Found in 2 of 19 (10.5%) 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: Brocalys_18 (F1), Purky_20 (P6),

Start 8:

- Found in 1 of 19 (5.3%) 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: Tortellini_20 (P2),

Start 9:

- Found in 7 of 19 (36.8%) of genes in pham
- Manual Annotations of this start: 4 of 17
- Called 57.1% of time when present
- Phage (with cluster) where this start called: BigNuz_20 (P4), Nazo_20 (P4), Phayonce_20 (P5), ThulaThula_20 (P5),

Start 17:

- Found in 2 of 19 (10.5%) 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: 32HC_29 (Z), Rem711_28 (Z),

Start 20:

- Found in 3 of 19 (15.8%) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Aikoy_40 (AE), Leopard_40 (AE), Onyinye_41 (AE),

Summary by clusters:

There are 11 clusters represented in this pham: P2, F1, singleton, P6, AD, P4, AF, I2, AE, Z, P5,

Info for manual annotations of cluster AD:

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

Info for manual annotations of cluster AE:

- Start number 20 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster AF:

- Start number 3 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster F1:

- Start number 7 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster I2:

- Start number 6 was manually annotated 2 times for cluster I2.

Info for manual annotations of cluster P2:

- Start number 8 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P4:

- Start number 9 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 9 was manually annotated 2 times for cluster P5.

Info for manual annotations of cluster P6:

- Start number 7 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster Z:

- Start number 17 was manually annotated 1 time for cluster Z.

Gene Information:

Gene: 32HC_29 Start: 22389, Stop: 24797, Start Num: 17

Candidate Starts for 32HC_29:

(Start: 17 @22389 has 1 MA's), (38, 22560), (49, 22695), (91, 23058), (98, 23094), (116, 23226), (119, 23244), (129, 23310), (133, 23382), (140, 23460), (141, 23463), (152, 23562), (192, 23823), (197, 23841), (198, 23856), (203, 23940), (207, 24009), (208, 24030), (209, 24033), (210, 24048), (211, 24105), (219, 24186), (221, 24219), (228, 24315), (232, 24417), (236, 24576),

Gene: Aikoy_40 Start: 29919, Stop: 32537, Start Num: 20

Candidate Starts for Aikoy_40:

(Start: 20 @29919 has 3 MA's), (36, 30078), (42, 30132), (43, 30147), (44, 30153), (46, 30174), (50, 30267), (54, 30291), (57, 30306), (66, 30372), (68, 30408), (70, 30423), (74, 30459), (82, 30567), (87,

30630), (88, 30642), (90, 30654), (96, 30684), (99, 30696), (100, 30711), (103, 30735), (112, 30807), (121, 30876), (134, 31017), (144, 31125), (163, 31257), (173, 31368), (188, 31479), (200, 31608), (201, 31626), (211, 31851), (217, 31914), (219, 31932), (220, 31959), (228, 32058), (232, 32160), (239, 32469), (242, 32523),

Gene: BigNuz_20 Start: 18782, Stop: 21163, Start Num: 9

Candidate Starts for BigNuz_20:

(Start: 9 @18782 has 4 MA's), (26, 18935), (39, 19028), (51, 19187), (53, 19208), (56, 19220), (65, 19286), (69, 19340), (76, 19412), (80, 19457), (83, 19478), (88, 19556), (95, 19589), (97, 19595), (109, 19694), (110, 19703), (125, 19841), (182, 20024), (185, 20051), (186, 20060), (190, 20111), (192, 20123), (194, 20129), (195, 20138), (196, 20150), (219, 20552), (221, 20585), (230, 20729), (231, 20738), (232, 20783), (236, 20942),

Gene: Brocalys_18 Start: 17383, Stop: 19617, Start Num: 7

Candidate Starts for Brocalys_18:

(Start: 6 @17371 has 2 MA's), (Start: 7 @17383 has 2 MA's), (11, 17404), (14, 17425), (19, 17464), (26, 17533), (28, 17542), (30, 17545), (33, 17596), (44, 17686), (47, 17731), (53, 17821), (55, 17830), (56, 17833), (58, 17854), (59, 17866), (65, 17899), (77, 18034), (81, 18082), (83, 18097), (84, 18118), (87, 18160), (88, 18175), (89, 18184), (95, 18211), (97, 18217), (106, 18286), (108, 18307), (109, 18313), (110, 18322), (113, 18349), (125, 18460), (130, 18481), (131, 18505), (135, 18571), (164, 18592), (167, 18610), (183, 18661), (184, 18667), (206, 18790), (208, 18832), (210, 18850), (216, 18928), (218, 18970), (223, 19036), (226, 19069), (229, 19150), (233, 19240), (235, 19369), (240, 19537),

Gene: Che9c_19 Start: 18477, Stop: 20729, Start Num: 6

Candidate Starts for Che9c_19:

(Start: 6 @18477 has 2 MA's), (Start: 9 @18501 has 4 MA's), (22, 18615), (26, 18651), (28, 18663), (32, 18675), (45, 18807), (53, 18933), (56, 18945), (58, 18966), (67, 19035), (77, 19146), (78, 19170), (81, 19194), (84, 19230), (86, 19248), (87, 19272), (88, 19287), (94, 19320), (95, 19323), (97, 19329), (105, 19395), (106, 19398), (113, 19461), (115, 19479), (125, 19572), (130, 19593), (131, 19617), (180, 19737), (183, 19773), (184, 19779), (206, 19902), (208, 19944), (210, 19962), (216, 20040), (218, 20082), (223, 20148), (226, 20181), (229, 20262), (233, 20352), (235, 20481), (240, 20649),

Gene: Dori_27 Start: 25587, Stop: 28415, Start Num: 4

Candidate Starts for Dori_27:

(1, 25494), (Start: 4 @25587 has 1 MA's), (10, 25665), (15, 25701), (18, 25728), (21, 25752), (29, 25821), (34, 25890), (40, 25926), (60, 26160), (62, 26172), (63, 26187), (67, 26223), (72, 26265), (75, 26319), (79, 26367), (82, 26397), (83, 26400), (93, 26508), (101, 26562), (102, 26577), (104, 26592), (111, 26661), (114, 26682), (118, 26703), (120, 26721), (122, 26742), (124, 26766), (126, 26778), (128, 26790), (136, 26892), (138, 26916), (141, 26955), (143, 26979), (144, 26985), (146, 26991), (149, 27027), (150, 27033), (151, 27063), (153, 27090), (165, 27174), (168, 27207), (169, 27216), (171, 27225), (174, 27249), (176, 27258), (178, 27270), (182, 27291), (184, 27315), (186, 27327), (187, 27339), (192, 27378), (199, 27474), (204, 27546), (208, 27651), (210, 27669), (211, 27726), (219, 27807), (221, 27840), (224, 27861), (227, 27900), (228, 27933), (232, 28035), (236, 28194),

Gene: Farewell_19 Start: 19297, Stop: 21606, Start Num: 3

Candidate Starts for Farewell_19:

(Start: 3 @19297 has 2 MA's), (12, 19396), (24, 19525), (27, 19531), (35, 19609), (48, 19738), (52, 19795), (55, 19819), (64, 19876), (67, 19912), (77, 20023), (78, 20047), (81, 20071), (84, 20107), (85, 20122), (86, 20125), (87, 20149), (88, 20164), (94, 20197), (95, 20200), (97, 20206), (105, 20272), (106, 20275), (113, 20338), (125, 20449), (130, 20470), (131, 20494), (180, 20614), (183, 20650), (184, 20656), (206, 20779), (208, 20821), (210, 20839), (216, 20917), (218, 20959), (223, 21025), (226, 21058), (229, 21139), (233, 21229), (235, 21358), (240, 21526),

Gene: IdentityCrisis_19 Start: 16453, Stop: 18753, Start Num: 2

Candidate Starts for IdentityCrisis_19:

(Start: 2 @16453 has 1 MA's), (5, 16495), (12, 16564), (13, 16573), (15, 16588), (16, 16612), (41, 16804), (52, 16942), (64, 17023), (71, 17098), (77, 17170), (78, 17194), (81, 17218), (84, 17254), (86, 17272), (87, 17296), (88, 17311), (94, 17344), (95, 17347), (97, 17353), (105, 17419), (106, 17422), (113, 17485), (115, 17503), (125, 17596), (130, 17617), (180, 17761), (183, 17797), (184, 17803), (206, 17926), (208, 17968), (210, 17986), (216, 18064), (218, 18106), (223, 18172), (226, 18205), (229, 18286), (233, 18376), (235, 18505), (240, 18673),

Gene: Leopard_40 Start: 30207, Stop: 32825, Start Num: 20

Candidate Starts for Leopard_40:

(Start: 20 @30207 has 3 MA's), (36, 30366), (42, 30420), (43, 30435), (44, 30441), (46, 30462), (50, 30555), (54, 30579), (57, 30594), (66, 30660), (68, 30696), (70, 30711), (74, 30747), (82, 30855), (87, 30918), (88, 30930), (90, 30942), (96, 30972), (99, 30984), (100, 30999), (103, 31023), (112, 31095), (121, 31164), (134, 31305), (144, 31413), (163, 31545), (173, 31656), (188, 31767), (200, 31896), (201, 31914), (211, 32139), (217, 32202), (219, 32220), (220, 32247), (228, 32346), (232, 32448), (239, 32757), (242, 32811),

Gene: Nazo_20 Start: 18782, Stop: 21163, Start Num: 9

Candidate Starts for Nazo_20:

(Start: 9 @18782 has 4 MA's), (26, 18935), (39, 19028), (51, 19187), (53, 19208), (56, 19220), (65, 19286), (69, 19340), (76, 19412), (80, 19457), (83, 19478), (88, 19556), (95, 19589), (97, 19595), (109, 19694), (110, 19703), (125, 19841), (182, 20024), (185, 20051), (186, 20060), (190, 20111), (192, 20123), (194, 20129), (195, 20138), (196, 20150), (219, 20552), (221, 20585), (230, 20729), (231, 20738), (232, 20783), (236, 20942),

Gene: Onyinye_41 Start: 30086, Stop: 32719, Start Num: 20

Candidate Starts for Onyinye_41:

(Start: 20 @30086 has 3 MA's), (36, 30245), (42, 30299), (43, 30314), (44, 30320), (46, 30341), (50, 30434), (54, 30458), (57, 30473), (66, 30539), (68, 30575), (70, 30590), (74, 30626), (82, 30734), (87, 30797), (88, 30809), (90, 30821), (96, 30851), (99, 30863), (100, 30878), (103, 30902), (112, 30974), (121, 31043), (134, 31184), (144, 31292), (163, 31424), (173, 31535), (188, 31646), (200, 31775), (201, 31793), (211, 32018), (217, 32081), (219, 32099), (220, 32126), (228, 32225), (232, 32327), (239, 32636), (242, 32690),

Gene: Phayonce_20 Start: 18734, Stop: 21115, Start Num: 9

Candidate Starts for Phayonce_20:

(Start: 9 @18734 has 4 MA's), (25, 18884), (26, 18887), (53, 19160), (56, 19172), (59, 19205), (65, 19238), (69, 19292), (76, 19364), (80, 19409), (81, 19415), (83, 19430), (84, 19451), (88, 19508), (95, 19541), (97, 19547), (109, 19646), (110, 19655), (125, 19793), (167, 19943), (177, 19955), (182, 19976), (185, 20003), (190, 20063), (192, 20075), (194, 20081), (195, 20090), (196, 20102), (202, 20213), (204, 20243), (205, 20246), (210, 20366), (211, 20423), (214, 20432), (221, 20537), (228, 20633), (232, 20735), (241, 21095),

Gene: Purky_20 Start: 18624, Stop: 20846, Start Num: 7

Candidate Starts for Purky_20:

(Start: 7 @18624 has 2 MA's), (26, 18777), (31, 18795), (53, 19050), (56, 19062), (58, 19083), (67, 19152), (77, 19263), (78, 19287), (81, 19311), (84, 19347), (86, 19365), (87, 19389), (88, 19404), (92, 19419), (94, 19437), (95, 19440), (97, 19446), (105, 19512), (106, 19515), (113, 19578), (115, 19596), (125, 19689), (127, 19701), (130, 19710), (131, 19734), (177, 19851), (180, 19854), (183, 19890), (184, 19896), (206, 20019), (208, 20061), (210, 20079), (216, 20157), (218, 20199), (223, 20265), (226, 20298), (229, 20379), (233, 20469), (235, 20598), (240, 20766),

Gene: Rem711_28 Start: 22439, Stop: 24847, Start Num: 17

Candidate Starts for Rem711_28:

(Start: 17 @22439 has 1 MA's), (38, 22610), (49, 22745), (91, 23108), (98, 23144), (116, 23276), (119, 23294), (132, 23420), (133, 23432), (138, 23474), (140, 23510), (141, 23513), (170, 23738), (181, 23783), (192, 23873), (207, 24059), (208, 24080), (211, 24155), (228, 24365), (232, 24467), (236, 24626),

Gene: Sbash_19 Start: 18307, Stop: 20691, Start Num: 6

Candidate Starts for Sbash_19:

(Start: 6 @18307 has 2 MA's), (Start: 9 @18331 has 4 MA's), (23, 18445), (26, 18481), (28, 18493), (32, 18505), (37, 18574), (53, 18763), (59, 18808), (61, 18817), (65, 18841), (69, 18895), (73, 18922), (76, 18967), (80, 19012), (81, 19018), (83, 19033), (84, 19054), (85, 19069), (88, 19111), (95, 19144), (97, 19150), (109, 19249), (110, 19258), (125, 19396), (130, 19417), (182, 19579), (185, 19606), (190, 19666), (192, 19678), (194, 19684), (195, 19693), (196, 19705), (202, 19816), (204, 19846), (205, 19849), (208, 19951), (210, 19969), (212, 20029), (213, 20032), (215, 20038), (222, 20140), (225, 20164), (227, 20191), (228, 20224), (237, 20482),

Gene: Sparky_19 Start: 19298, Stop: 21607, Start Num: 3

Candidate Starts for Sparky_19:

(Start: 3 @19298 has 2 MA's), (12, 19397), (24, 19526), (27, 19532), (35, 19610), (48, 19739), (52, 19796), (64, 19877), (67, 19913), (77, 20024), (78, 20048), (81, 20072), (84, 20108), (86, 20126), (87, 20150), (88, 20165), (94, 20198), (95, 20201), (97, 20207), (105, 20273), (106, 20276), (113, 20339), (125, 20450), (130, 20471), (180, 20615), (183, 20651), (184, 20657), (206, 20780), (208, 20822), (210, 20840), (216, 20918), (218, 20960), (223, 21026), (226, 21059), (229, 21140), (233, 21230), (235, 21359), (240, 21527),

Gene: Stuck_23 Start: 18474, Stop: 20888, Start Num: 6

Candidate Starts for Stuck_23:

(Start: 6 @18474 has 2 MA's), (Start: 9 @18498 has 4 MA's), (13, 18525), (23, 18612), (26, 18648), (28, 18660), (32, 18672), (45, 18804), (53, 18930), (56, 18942), (58, 18963), (64, 18996), (71, 19071), (77, 19143), (83, 19206), (86, 19245), (87, 19269), (88, 19284), (89, 19293), (95, 19320), (97, 19326), (102, 19371), (106, 19395), (107, 19407), (108, 19416), (109, 19422), (110, 19431), (113, 19458), (115, 19476), (117, 19482), (125, 19569), (130, 19590), (131, 19614), (182, 19752), (185, 19779), (190, 19839), (193, 19854), (194, 19857), (196, 19878), (199, 19947), (204, 20019), (208, 20124), (210, 20142), (211, 20199), (219, 20280), (221, 20313), (224, 20334), (227, 20373), (228, 20406), (232, 20508), (236, 20667), (241, 20868),

Gene: ThulaThula_20 Start: 18740, Stop: 21121, Start Num: 9

Candidate Starts for ThulaThula_20:

(Start: 9 @18740 has 4 MA's), (25, 18890), (26, 18893), (53, 19166), (56, 19178), (59, 19211), (65, 19244), (69, 19298), (76, 19370), (80, 19415), (81, 19421), (83, 19436), (84, 19457), (88, 19514), (95, 19547), (97, 19553), (109, 19652), (110, 19661), (125, 19799), (167, 19949), (177, 19961), (182, 19982), (185, 20009), (190, 20069), (192, 20081), (194, 20087), (195, 20096), (196, 20108), (202, 20219), (204, 20249), (205, 20252), (210, 20372), (211, 20429), (214, 20438), (221, 20543), (228, 20639), (232, 20741), (241, 21101),

Gene: Tortellini_20 Start: 18641, Stop: 21592, Start Num: 8

Candidate Starts for Tortellini_20:

(Start: 8 @18641 has 1 MA's), (25, 18791), (44, 18932), (53, 19067), (56, 19079), (58, 19100), (59, 19112), (64, 19133), (77, 19280), (81, 19328), (83, 19343), (84, 19364), (86, 19382), (87, 19406), (88, 19421), (89, 19430), (95, 19457), (97, 19463), (102, 19508), (106, 19532), (107, 19544), (108, 19553), (109, 19559), (113, 19595), (115, 19613), (123, 19673), (125, 19706), (137, 19838), (139, 19877),

(142, 19898), (145, 19922), (147, 19934), (148, 19946), (154, 20048), (155, 20072), (156, 20111),
(157, 20135), (158, 20147), (159, 20183), (160, 20189), (161, 20219), (162, 20246), (166, 20330),
(171, 20372), (172, 20381), (175, 20405), (179, 20426), (180, 20429), (182, 20447), (186, 20483),
(187, 20495), (189, 20504), (191, 20534), (199, 20630), (202, 20672), (204, 20702), (208, 20807),
(210, 20825), (216, 20903), (223, 21011), (226, 21044), (229, 21125), (233, 21215), (234, 21224),
(235, 21344), (238, 21485), (240, 21512),