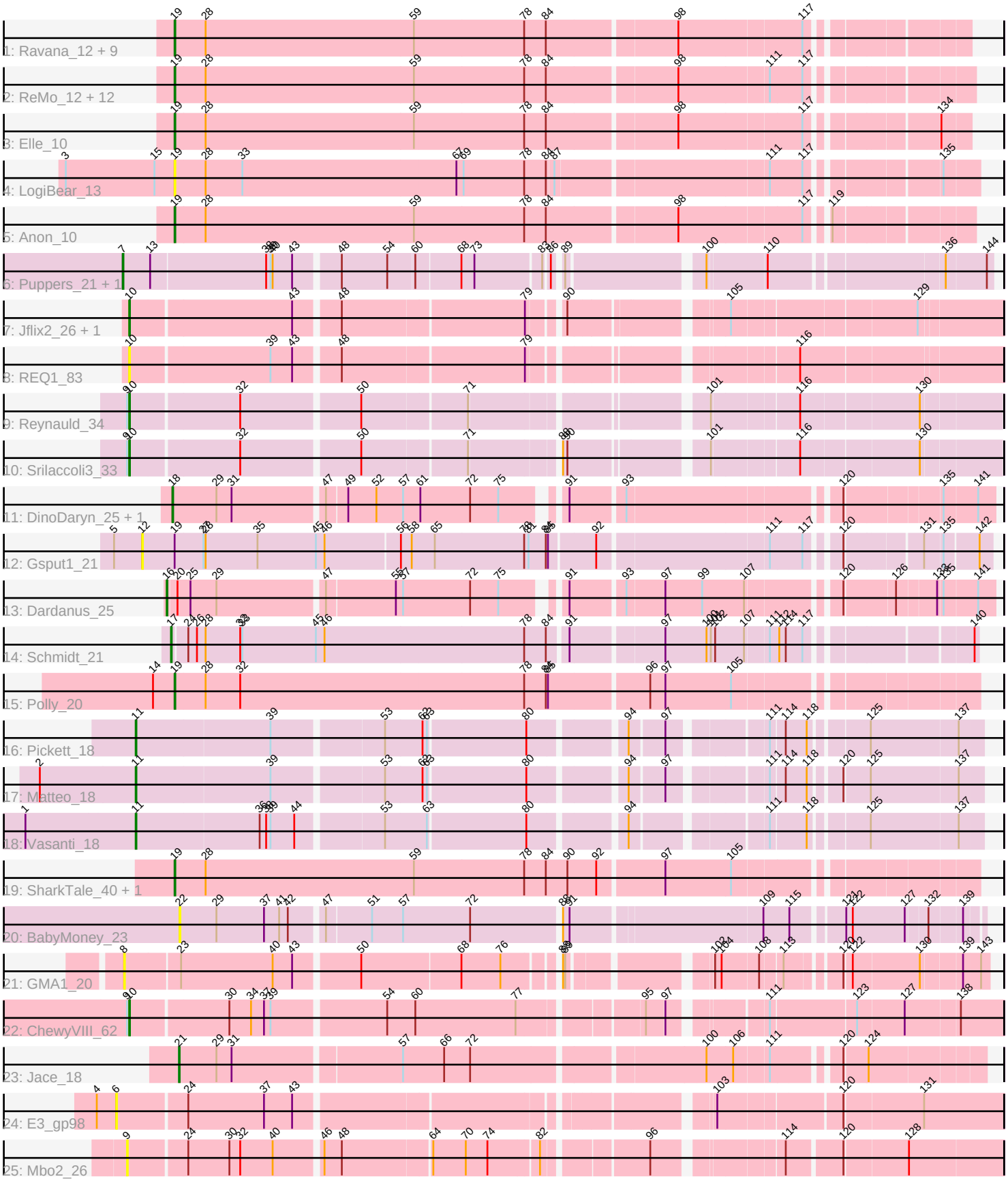
Pham 347719


1: Ravana_12 + 9
2: ReMo_12 + 12
3: Elle_10
4: LogiBear_13
5: Anon_10
6: Puppers_21 + 1
7: Jflix2_26 + 1
8: REQ1_83
9: Reynauld_34
10: Srilaccoli3_33
11: DinoDaryn_25 + 1
12: Gsput1_21
13: Dardanus_25
14: Schmidt_21
15: Polly_20
16: Pickett_18
17: Matteo_18
18: Vasanti_18
19: SharkTale_40 + 1
20: BabyMoney_23
21: GMA1_20
22: ChewyVIII_62
23: Jace_18
24: E3_gp98
25: Mbo2_26

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 347719 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347719 has 50 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Ravana_12, Remus_12, Warrior24_12, Oofda_12, Nedarya_11, Rosalind_12, Switzerland_12, Waits_12, Battleship_13, Strosahl_12
• Track 2 : ReMo_12, LastResort_12, Looper_13, Boohoo_12, Nebulosus_12, JSwag_12, MinecraftSteve_13, Epsocamisio_12, Anaysia_12, DekHockey33_12, Soups_12, ShayRa_13, KatherineG_12
• Track 3 : Elle_10
• Track 4 : LogiBear_13
• Track 5 : Anon_10
• Track 6 : Puppers_21, Widow_21
• Track 7 : Jflix2_26, SFuller_28
• Track 8 : REQ1_83
• Track 9 : Reynauld_34
• Track 10 : Srilaccoli3_33
• Track 11 : DinoDaryn_25, Huffy_25
• Track 12 : Gsput1_21
• Track 13 : Dardanus_25
• Track 14 : Schmidt_21
• Track 15 : Polly_20
• Track 16 : Pickett_18
• Track 17 : Matteo_18
• Track 18 : Vasanti_18
• Track 19 : SharkTale_40, YungMoney_42
• Track 20 : BabyMoney_23
• Track 21 : GMA1_20
• Track 22 : ChewyVIII_62
• Track 23 : Jace_18
• Track 24 : E3_gp98
• Track 25 : Mbo2_26

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

The start number called the most often in the published annotations is 19, it was called in 27 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Anaysia_12, Anon_10, Battleship_13, Boohoo_12, DekHockey33_12, Elle_10, Epsocamisio_12, JSwag_12, KatherineG_12, LastResort_12, LogiBear_13, Looper_13, MinecraftSteve_13, Nebulosus_12, Nedarya_11, Oofda_12, Polly_20, Ravana_12, ReMo_12, Remus_12, Rosalind_12, SharkTale_40, ShayRa_13, Soups_12, Strosahl_12, Switzerland_12, Waits_12, Warrior24_12, YungMoney_42,

Genes that have the "Most Annotated" start but do not call it:
• Gsput1_21,

Genes that do not have the "Most Annotated" start:
• BabyMoney_23, ChewyVIII_62, Dardanus_25, DinoDaryn_25, E3_gp98, GMA1_20, Huffy_25, Jace_18, Jflix2_26, Matteo_18, Mbo2_26, Pickett_18, Puppers_21, REQ1_83, Reynauld_34, SFuller_28, Schmidt_21, Srilaccoli3_33, Vasanti_18, Widow_21,

Summary by start number:

Start 6:
• Found in 1 of 50 (2.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: E3_gp98 (singleton),

Start 7:
• Found in 2 of 50 (4.0%) of genes in pham
• Manual Annotations of this start: 2 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Puppers_21 (CD), Widow_21 (CD),

Start 8:
• Found in 1 of 50 (2.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA1_20 (singleton),

Start 9:
• Found in 4 of 50 (8.0%) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Mbo2_26 (singleton),

Start 10:
• Found in 6 of 50 (12.0%) of genes in pham
• Manual Annotations of this start: 5 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ChewyVIII_62 (singleton), Jflix2_26 (CF), REQ1_83 (CF), Reynauld_34 (CH), SFuller_28 (CF), Srilaccoli3_33 (CH),

Start 11:
• Found in 3 of 50 (6.0%) of genes in pham
• Manual Annotations of this start: 3 of 42
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Matteo_18 (CZ2), Pickett_18 (CZ2), Vasanti_18 (CZ2),

Start 12:
• Found in 1 of 50 (2.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gsput1_21 (CU2),

Start 16:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dardanus_25 (CU3),

Start 17:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Schmidt_21 (CU4),

Start 18:
• Found in 2 of 50 (4.0%) of genes in pham
• Manual Annotations of this start: 2 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DinoDaryn_25 (CU1), Huffy_25 (CU1),

Start 19:
• Found in 30 of 50 (60.0%) of genes in pham
• Manual Annotations of this start: 27 of 42
• Called 96.7% of time when present
• Phage (with cluster) where this start called: Anaysia_12 (A15), Anon_10 (A15), Battleship_13 (A15), Boohoo_12 (A15), DekHockey33_12 (A15), Elle_10 (A15), Epsocamisio_12 (A15), JSwag_12 (A15), KatherineG_12 (A15), LastResort_12 (A15), LogiBear_13 (A15), Looper_13 (A15), MinecraftSteve_13 (A15), Nebulosus_12 (A15), Nedarya_11 (A15), Oofda_12 (A15), Polly_20 (CZ1), Ravana_12 (A15), ReMo_12 (A15), Remus_12 (A15), Rosalind_12 (A15), SharkTale_40 (DC1), ShayRa_13 (A15), Soups_12 (A15), Strosahl_12 (A15), Switzerland_12 (A15), Waits_12 (A15), Warrior24_12 (A15), YungMoney_42 (DC1),

Start 21:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jace_18 (singleton),

Start 22:
• Found in 1 of 50 (2.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BabyMoney_23 (DT),

Summary by clusters:

There are 13 clusters represented in this pham: A15, singleton, CU4, CU3, CU2, CU1, CZ2, CZ1, CF, CD, CH, DT, DC1,

Info for manual annotations of cluster A15:
•Start number 19 was manually annotated 25 times for cluster A15.

Info for manual annotations of cluster CD:
•Start number 7 was manually annotated 2 times for cluster CD.

Info for manual annotations of cluster CF:
•Start number 10 was manually annotated 2 times for cluster CF.

Info for manual annotations of cluster CH:
•Start number 10 was manually annotated 2 times for cluster CH.

Info for manual annotations of cluster CU1:
•Start number 18 was manually annotated 2 times for cluster CU1.

Info for manual annotations of cluster CU3:
•Start number 16 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:
•Start number 17 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CZ1:
•Start number 19 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ2:
•Start number 11 was manually annotated 3 times for cluster CZ2.

Info for manual annotations of cluster DC1:
•Start number 19 was manually annotated 1 time for cluster DC1.

Gene Information:

Gene: Anaysia_12 Start: 5392, Stop: 6432, Start Num: 19
Candidate Starts for Anaysia_12:
(Start: 19 @5392 has 27 MA's), (28, 5434), (59, 5722), (78, 5872), (84, 5902), (98, 6073), (111, 6193), (117, 6235),

Gene: Anon_10 Start: 5737, Stop: 6777, Start Num: 19
Candidate Starts for Anon_10:
(Start: 19 @5737 has 27 MA's), (28, 5779), (59, 6067), (78, 6217), (84, 6247), (98, 6418), (117, 6580), (119, 6601),

Gene: BabyMoney_23 Start: 20043, Stop: 21062, Start Num: 22
Candidate Starts for BabyMoney_23:

(22, 20043), (29, 20094), (37, 20160), (41, 20181), (42, 20193), (47, 20235), (51, 20295), (57, 20337), (72, 20430), (88, 20547), (91, 20556), (109, 20796), (115, 20829), (121, 20892), (122, 20901), (127, 20970), (132, 20997), (139, 21039),

Gene: Battleship_13 Start: 5514, Stop: 6554, Start Num: 19
Candidate Starts for Battleship_13:
(Start: 19 @5514 has 27 MA's), (28, 5556), (59, 5844), (78, 5994), (84, 6024), (98, 6195), (117, 6357),

Gene: Boohoo_12 Start: 5392, Stop: 6432, Start Num: 19
Candidate Starts for Boohoo_12:
(Start: 19 @5392 has 27 MA's), (28, 5434), (59, 5722), (78, 5872), (84, 5902), (98, 6073), (111, 6193), (117, 6235),

Gene: ChewyVIII_62 Start: 43758, Stop: 44864, Start Num: 10
Candidate Starts for ChewyVIII_62:
(9, 43755), (Start: 10 @43758 has 5 MA's), (30, 43887), (34, 43917), (37, 43935), (39, 43944), (54, 44094), (60, 44133), (77, 44271), (95, 44424), (97, 44448), (111, 44559), (123, 44670), (127, 44733), (138, 44805),

Gene: Dardanus_25 Start: 18017, Stop: 19045, Start Num: 16
Candidate Starts for Dardanus_25:
(Start: 16 @18017 has 1 MA's), (20, 18029), (25, 18044), (29, 18080), (47, 18221), (55, 18314), (57, 18323), (72, 18416), (75, 18455), (91, 18521), (93, 18590), (97, 18641), (99, 18692), (107, 18749), (120, 18857), (126, 18920), (133, 18971), (135, 18977), (141, 19022),

Gene: DekHockey33_12 Start: 5514, Stop: 6554, Start Num: 19
Candidate Starts for DekHockey33_12:
(Start: 19 @5514 has 27 MA's), (28, 5556), (59, 5844), (78, 5994), (84, 6024), (98, 6195), (111, 6315), (117, 6357),

Gene: DinoDaryn_25 Start: 18046, Stop: 19071, Start Num: 18
Candidate Starts for DinoDaryn_25:
(Start: 18 @18046 has 2 MA's), (29, 18106), (31, 18127), (47, 18247), (49, 18274), (52, 18313), (57, 18349), (61, 18373), (72, 18442), (75, 18481), (91, 18547), (93, 18616), (120, 18883), (135, 19003), (141, 19048),

Gene: E3_gp98 Start: 56068, Stop: 57180, Start Num: 6
Candidate Starts for E3_gp98:
(4, 56041), (6, 56068), (24, 56158), (37, 56263), (43, 56302), (103, 56809), (120, 56965), (131, 57070),

Gene: Elle_10 Start: 5109, Stop: 6143, Start Num: 19
Candidate Starts for Elle_10:
(Start: 19 @5109 has 27 MA's), (28, 5151), (59, 5439), (78, 5589), (84, 5619), (98, 5790), (117, 5952), (134, 6105),

Gene: Epsocamisio_12 Start: 5392, Stop: 6432, Start Num: 19
Candidate Starts for Epsocamisio_12:
(Start: 19 @5392 has 27 MA's), (28, 5434), (59, 5722), (78, 5872), (84, 5902), (98, 6073), (111, 6193), (117, 6235),

Gene: GMA1_20 Start: 17561, Stop: 18616, Start Num: 8
Candidate Starts for GMA1_20:

(8, 17561), (23, 17633), (40, 17759), (43, 17786), (50, 17870), (68, 18005), (76, 18059), (88, 18122), (89, 18125), (102, 18287), (104, 18296), (108, 18344), (113, 18371), (120, 18434), (122, 18443), (130, 18533), (139, 18584), (143, 18605),

Gene: Gsput1_21 Start: 17048, Stop: 18142, Start Num: 12
Candidate Starts for Gsput1_21:
(5, 17009), (12, 17048), (Start: 19 @17093 has 27 MA's), (27, 17132), (28, 17135), (35, 17207), (45, 17288), (46, 17300), (56, 17399), (58, 17414), (65, 17444), (78, 17567), (81, 17573), (84, 17597), (85, 17600), (92, 17660), (111, 17882), (117, 17924), (120, 17960), (131, 18056), (135, 18080), (142, 18125),

Gene: Huffy_25 Start: 18046, Stop: 19071, Start Num: 18
Candidate Starts for Huffy_25:
(Start: 18 @18046 has 2 MA's), (29, 18106), (31, 18127), (47, 18247), (49, 18274), (52, 18313), (57, 18349), (61, 18373), (72, 18442), (75, 18481), (91, 18547), (93, 18616), (120, 18883), (135, 19003), (141, 19048),

Gene: JSwag_12 Start: 5392, Stop: 6426, Start Num: 19
Candidate Starts for JSwag_12:
(Start: 19 @5392 has 27 MA's), (28, 5434), (59, 5722), (78, 5872), (84, 5902), (98, 6073), (111, 6193), (117, 6235),

Gene: Jace_18 Start: 16293, Stop: 17318, Start Num: 21
Candidate Starts for Jace_18:
(Start: 21 @16293 has 1 MA's), (29, 16344), (31, 16365), (57, 16587), (66, 16644), (72, 16680), (100, 16980), (106, 17016), (111, 17061), (120, 17139), (124, 17169),

Gene: Jflix2_26 Start: 25867, Stop: 26955, Start Num: 10
Candidate Starts for Jflix2_26:
(Start: 10 @25867 has 5 MA's), (43, 26083), (48, 26140), (79, 26383), (90, 26422), (105, 26608), (129, 26845),

Gene: KatherineG_12 Start: 5514, Stop: 6554, Start Num: 19
Candidate Starts for KatherineG_12:
(Start: 19 @5514 has 27 MA's), (28, 5556), (59, 5844), (78, 5994), (84, 6024), (98, 6195), (111, 6315), (117, 6357),

Gene: LastResort_12 Start: 5392, Stop: 6432, Start Num: 19
Candidate Starts for LastResort_12:
(Start: 19 @5392 has 27 MA's), (28, 5434), (59, 5722), (78, 5872), (84, 5902), (98, 6073), (111, 6193), (117, 6235),

Gene: LogiBear_13 Start: 6103, Stop: 7143, Start Num: 19
Candidate Starts for LogiBear_13:
(3, 5953), (15, 6076), (Start: 19 @6103 has 27 MA's), (28, 6145), (33, 6196), (67, 6490), (69, 6499), (78, 6583), (84, 6613), (87, 6622), (111, 6898), (117, 6940), (135, 7096),

Gene: Looper_13 Start: 5392, Stop: 6432, Start Num: 19
Candidate Starts for Looper_13:
(Start: 19 @5392 has 27 MA's), (28, 5434), (59, 5722), (78, 5872), (84, 5902), (98, 6073), (111, 6193), (117, 6235),

Gene: Matteo_18 Start: 16486, Stop: 17544, Start Num: 11

Candidate Starts for Matteo_18:
(2, 16354), (Start: 11 @16486 has 3 MA's), (39, 16669), (53, 16813), (62, 16864), (63, 16870), (80, 17002), (94, 17119), (97, 17164), (111, 17281), (114, 17299), (118, 17326), (120, 17362), (125, 17395), (137, 17512),

Gene: Mbo2_26 Start: 27781, Stop: 28878, Start Num: 9
Candidate Starts for Mbo2_26:
(9, 27781), (24, 27856), (30, 27913), (32, 27928), (40, 27973), (46, 28033), (48, 28057), (64, 28174), (70, 28219), (74, 28249), (82, 28315), (96, 28444), (114, 28597), (120, 28666), (128, 28750),

Gene: MinecraftSteve_13 Start: 5514, Stop: 6554, Start Num: 19
Candidate Starts for MinecraftSteve_13:
(Start: 19 @5514 has 27 MA's), (28, 5556), (59, 5844), (78, 5994), (84, 6024), (98, 6195), (111, 6315), (117, 6357),

Gene: Nebulosus_12 Start: 5392, Stop: 6432, Start Num: 19
Candidate Starts for Nebulosus_12:
(Start: 19 @5392 has 27 MA's), (28, 5434), (59, 5722), (78, 5872), (84, 5902), (98, 6073), (111, 6193), (117, 6235),

Gene: Nedarya_11 Start: 5992, Stop: 7026, Start Num: 19
Candidate Starts for Nedarya_11:
(Start: 19 @5992 has 27 MA's), (28, 6034), (59, 6322), (78, 6472), (84, 6502), (98, 6673), (117, 6835),

Gene: Oofda_12 Start: 5370, Stop: 6404, Start Num: 19
Candidate Starts for Oofda_12:
(Start: 19 @5370 has 27 MA's), (28, 5412), (59, 5700), (78, 5850), (84, 5880), (98, 6051), (117, 6213),

Gene: Pickett_18 Start: 16479, Stop: 17537, Start Num: 11
Candidate Starts for Pickett_18:
(Start: 11 @16479 has 3 MA's), (39, 16662), (53, 16806), (62, 16857), (63, 16863), (80, 16995), (94, 17112), (97, 17157), (111, 17274), (114, 17292), (118, 17319), (125, 17388), (137, 17505),

Gene: Polly_20 Start: 19454, Stop: 20509, Start Num: 19
Candidate Starts for Polly_20:
(14, 19424), (Start: 19 @19454 has 27 MA's), (28, 19496), (32, 19544), (78, 19934), (84, 19964), (85, 19967), (96, 20099), (97, 20120), (105, 20210),

Gene: Puppers_21 Start: 17502, Stop: 18587, Start Num: 7
Candidate Starts for Puppers_21:
(Start: 7 @17502 has 2 MA's), (13, 17538), (38, 17691), (39, 17697), (40, 17700), (43, 17727), (48, 17784), (54, 17847), (60, 17883), (68, 17943), (73, 17961), (83, 18048), (86, 18054), (89, 18063), (100, 18234), (110, 18309), (136, 18525), (144, 18579),

Gene: REQ1_83 Start: 49534, Stop: 50622, Start Num: 10
Candidate Starts for REQ1_83:
(Start: 10 @49534 has 5 MA's), (39, 49720), (43, 49750), (48, 49807), (79, 50050), (116, 50356),

Gene: Ravana_12 Start: 5367, Stop: 6401, Start Num: 19
Candidate Starts for Ravana_12:
(Start: 19 @5367 has 27 MA's), (28, 5409), (59, 5697), (78, 5847), (84, 5877), (98, 6048), (117, 6210),

Gene: ReMo_12 Start: 5392, Stop: 6432, Start Num: 19

Candidate Starts for ReMo_12:
(Start: 19 @5392 has 27 MA's), (28, 5434), (59, 5722), (78, 5872), (84, 5902), (98, 6073), (111, 6193), (117, 6235),

Gene: Remus_12 Start: 5360, Stop: 6394, Start Num: 19
Candidate Starts for Remus_12:
(Start: 19 @5360 has 27 MA's), (28, 5402), (59, 5690), (78, 5840), (84, 5870), (98, 6041), (117, 6203),

Gene: Reynauld_34 Start: 35895, Stop: 36983, Start Num: 10
Candidate Starts for Reynauld_34:
(9, 35892), (Start: 10 @35895 has 5 MA's), (32, 36039), (50, 36195), (71, 36333), (101, 36615), (116, 36723), (130, 36879),

Gene: Rosalind_12 Start: 5514, Stop: 6554, Start Num: 19
Candidate Starts for Rosalind_12:
(Start: 19 @5514 has 27 MA's), (28, 5556), (59, 5844), (78, 5994), (84, 6024), (98, 6195), (117, 6357),

Gene: SFuller_28 Start: 26460, Stop: 27548, Start Num: 10
Candidate Starts for SFuller_28:
(Start: 10 @26460 has 5 MA's), (43, 26676), (48, 26733), (79, 26976), (90, 27015), (105, 27201), (129, 27438),

Gene: Schmidt_21 Start: 16046, Stop: 17080, Start Num: 17
Candidate Starts for Schmidt_21:
(Start: 17 @16046 has 1 MA's), (24, 16064), (26, 16076), (28, 16088), (32, 16136), (33, 16139), (45, 16241), (46, 16253), (78, 16526), (84, 16556), (91, 16580), (97, 16700), (100, 16757), (101, 16763), (102, 16769), (107, 16808), (111, 16838), (112, 16850), (114, 16859), (117, 16880), (140, 17075),

Gene: SharkTale_40 Start: 34681, Stop: 35736, Start Num: 19
Candidate Starts for SharkTale_40:
(Start: 19 @34681 has 27 MA's), (28, 34723), (59, 35011), (78, 35161), (84, 35191), (90, 35221), (92, 35260), (97, 35347), (105, 35437),

Gene: ShayRa_13 Start: 5514, Stop: 6554, Start Num: 19
Candidate Starts for ShayRa_13:
(Start: 19 @5514 has 27 MA's), (28, 5556), (59, 5844), (78, 5994), (84, 6024), (98, 6195), (111, 6315), (117, 6357),

Gene: Soups_12 Start: 5514, Stop: 6554, Start Num: 19
Candidate Starts for Soups_12:
(Start: 19 @5514 has 27 MA's), (28, 5556), (59, 5844), (78, 5994), (84, 6024), (98, 6195), (111, 6315), (117, 6357),

Gene: Srilaccoli3_33 Start: 34819, Stop: 35907, Start Num: 10
Candidate Starts for Srilaccoli3_33:
(9, 34816), (Start: 10 @34819 has 5 MA's), (32, 34963), (50, 35119), (71, 35257), (88, 35368), (90, 35374), (101, 35539), (116, 35647), (130, 35803),

Gene: Strosahl_12 Start: 5360, Stop: 6394, Start Num: 19
Candidate Starts for Strosahl_12:
(Start: 19 @5360 has 27 MA's), (28, 5402), (59, 5690), (78, 5840), (84, 5870), (98, 6041), (117, 6203),

Gene: Switzerland_12 Start: 5514, Stop: 6554, Start Num: 19

Candidate Starts for Switzerland_12:
(Start: 19 @5514 has 27 MA's), (28, 5556), (59, 5844), (78, 5994), (84, 6024), (98, 6195), (117, 6357),

Gene: Vasanti_18 Start: 16494, Stop: 17552, Start Num: 11
Candidate Starts for Vasanti_18:
(1, 16344), (Start: 11 @16494 has 3 MA's), (36, 16662), (38, 16671), (39, 16677), (44, 16710), (53, 16821), (63, 16878), (80, 17010), (94, 17127), (111, 17289), (118, 17334), (125, 17403), (137, 17520),

Gene: Waits_12 Start: 5366, Stop: 6400, Start Num: 19
Candidate Starts for Waits_12:
(Start: 19 @5366 has 27 MA's), (28, 5408), (59, 5696), (78, 5846), (84, 5876), (98, 6047), (117, 6209),

Gene: Warrior24_12 Start: 5370, Stop: 6404, Start Num: 19
Candidate Starts for Warrior24_12:
(Start: 19 @5370 has 27 MA's), (28, 5412), (59, 5700), (78, 5850), (84, 5880), (98, 6051), (117, 6213),

Gene: Widow_21 Start: 17493, Stop: 18578, Start Num: 7
Candidate Starts for Widow_21:
(Start: 7 @17493 has 2 MA's), (13, 17529), (38, 17682), (39, 17688), (40, 17691), (43, 17718), (48, 17775), (54, 17838), (60, 17874), (68, 17934), (73, 17952), (83, 18039), (86, 18045), (89, 18054), (100, 18225), (110, 18300), (136, 18516), (144, 18570),

Gene: YungMoney_42 Start: 36228, Stop: 37283, Start Num: 19
Candidate Starts for YungMoney_42:
(Start: 19 @36228 has 27 MA's), (28, 36270), (59, 36558), (78, 36708), (84, 36738), (90, 36768), (92, 36807), (97, 36894), (105, 36984),