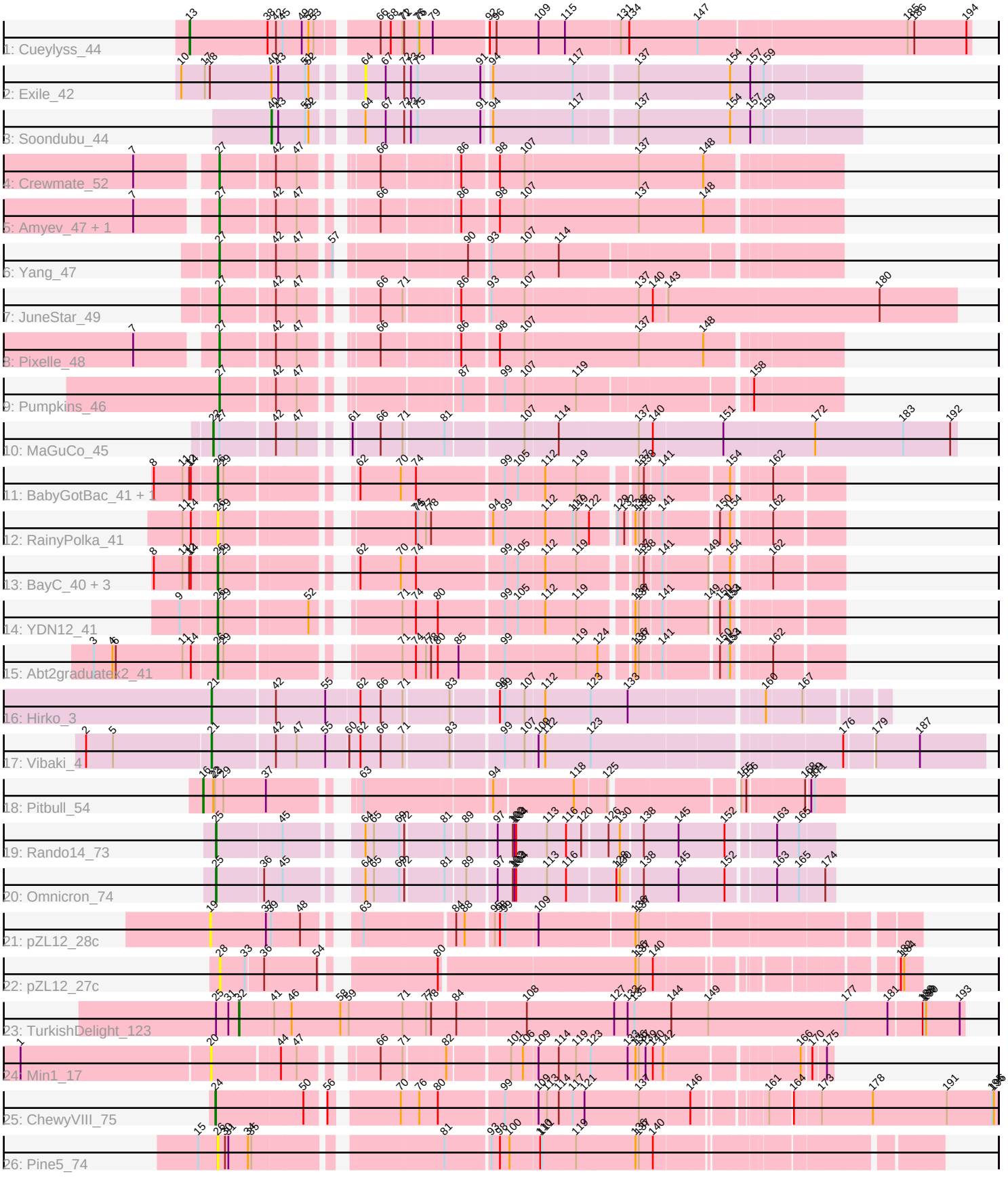
Pham 196718


1: Cueylyss_44
2: Exile_42
3: Soondubu_44
4: Crewmate_52
5: Amyev_47 + 1
6: Yang_47
7: JuneStar_49
8: Pixelle_48
9: Pumpkins_46
10: MaGuCo_45
11: BabyGotBac_41 + 1
12: RainyPolka_41
13: BayC_40 + 3
14: YDN12_41
15: Abt2graduatek2_41
16: Hirko_3
17: Vibaki_4
18: Pitbull_54
19: Rando14_73
20: Omnicron_74
21: pZL12_28c
22: pZL12_27c
23: TurkishDelight_123
24: Min1_17
25: ChewyVIII_75
26: Pine5_74

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 196718 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196718 has 31 members, 7 are drafts.

Phages represented in each track:
- Track 1 : Cueylyss_44
- Track 2 : Exile_42
- Track 3 : Soondubu_44
- Track 4 : Crewmate_52
- Track 5 : Amyev_47, Tian_46
- Track 6 : Yang_47
- Track 7 : JuneStar_49
- Track 8 : Pixelle_48
- Track 9 : Pumpkins_46
- Track 10 : MaGuCo_45
- Track 11 : BabyGotBac_41, TP1604_40
- Track 12 : RainyPolka_41
- Track 13 : BayC_40, Asis_40, Salete_40, Maih_39
- Track 14 : YDN12_41
- Track 15 : Abt2graduatex2_41
- Track 16 : Hirko_3
- Track 17 : Vibaki_4
- Track 18 : Pitbull_54
- Track 19 : Rando14_73
- Track 20 : Omnicron_74
- Track 21 : pZL12_28c
- Track 22 : pZL12_27c
- Track 23 : TurkishDelight_123
- Track 24 : Min1_17
- Track 25 : ChewyVIII_75
- Track 26 : Pine5_74

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

The start number called the most often in the published annotations is 26, it was called in 8 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Abt2graduatex2_41, Asis_40, BabyGotBac_41, BayC_40, Maih_39, Pine5_74, RainyPolka_41, Salete_40, TP1604_40, YDN12_41,

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

Genes that do not have the "Most Annotated" start:
• Amyev_47, ChewyVIII_75, Crewmate_52, Cueylyss_44, Exile_42, Hirko_3, JuneStar_49, MaGuCo_45, Min1_17, Omnicron_74, Pitbull_54, Pixelle_48, Pumpkins_46, Rando14_73, Soondubu_44, Tian_46, TurkishDelight_123, Vibaki_4, Yang_47, pZL12_27c, pZL12_28c,

Summary by start number:

Start 13:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cueylyss_44 (A1),

Start 16:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pitbull_54 (FQ),

Start 19:
• Found in 1 of 31 (3.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: pZL12_28c (singleton),

Start 20:
• Found in 1 of 31 (3.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Min1_17 (singleton),

Start 21:
• Found in 2 of 31 (6.5%) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hirko_3 (FL), Vibaki_4 (FL),

Start 22:
• Found in 2 of 31 (6.5%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 50.0% of time when present
• Phage (with cluster) where this start called: MaGuCo_45 (AZ2),

Start 24:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 24

• Called 100.0% of time when present
• Phage (with cluster) where this start called: ChewyVIII_75 (singleton),

Start 25:
• Found in 3 of 31 (9.7%) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Omnicron_74 (K5), Rando14_73 (K5),

Start 26:
• Found in 10 of 31 (32.3%) of genes in pham
• Manual Annotations of this start: 8 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abt2graduatex2_41 (BG), Asis_40 (BG), BabyGotBac_41 (BG), BayC_40 (BG), Maih_39 (BG), Pine5_74 (singleton), RainyPolka_41 (BG), Salete_40 (BG), TP1604_40 (BG), YDN12_41 (BG),

Start 27:
• Found in 8 of 31 (25.8%) of genes in pham
• Manual Annotations of this start: 6 of 24
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Amyev_47 (AZ1), Crewmate_52 (AZ1), JuneStar_49 (AZ1), Pixelle_48 (AZ1), Pumpkins_46 (AZ1), Tian_46 (AZ1), Yang_47 (AZ1),

Start 28:
• Found in 1 of 31 (3.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: pZL12_27c (singleton),

Start 32:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TurkishDelight_123 (singleton),

Start 40:
• Found in 2 of 31 (6.5%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Soondubu_44 (AZ),

Start 64:
• Found in 4 of 31 (12.9%) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Exile_42 (AZ),

Summary by clusters:

There are 9 clusters represented in this pham: FQ, singleton, BG, A1, K5, AZ1, AZ2, AZ, FL,

Info for manual annotations of cluster A1:
•Start number 13 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster AZ:
•Start number 40 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ1:
•Start number 27 was manually annotated 6 times for cluster AZ1.

Info for manual annotations of cluster AZ2:
•Start number 22 was manually annotated 1 time for cluster AZ2.

Info for manual annotations of cluster BG:
•Start number 26 was manually annotated 8 times for cluster BG.

Info for manual annotations of cluster FL:
•Start number 21 was manually annotated 2 times for cluster FL.

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

Info for manual annotations of cluster K5:
•Start number 25 was manually annotated 2 times for cluster K5.

Gene Information:

Gene: Abt2graduatex2_41 Start: 32795, Stop: 31851, Start Num: 26
Candidate Starts for Abt2graduatex2_41:
(3, 33008), (4, 32975), (6, 32969), (11, 32852), (14, 32837), (Start: 26 @32795 has 8 MA's), (29, 32786), (71, 32534), (74, 32513), (77, 32495), (78, 32486), (80, 32474), (85, 32438), (99, 32366), (119, 32246), (124, 32213), (136, 32168), (137, 32162), (141, 32126), (150, 32039), (153, 32024), (154, 32021), (162, 31967),

Gene: Amyev_47 Start: 35220, Stop: 36194, Start Num: 27
Candidate Starts for Amyev_47:
(7, 35097), (Start: 27 @35220 has 6 MA's), (42, 35304), (47, 35340), (66, 35439), (86, 35565), (98, 35625), (107, 35667), (137, 35862), (148, 35973),

Gene: Asis_40 Start: 32623, Stop: 31679, Start Num: 26
Candidate Starts for Asis_40:
(8, 32728), (11, 32680), (12, 32668), (14, 32665), (Start: 26 @32623 has 8 MA's), (29, 32614), (62, 32437), (70, 32365), (74, 32341), (99, 32194), (105, 32173), (112, 32128), (119, 32074), (137, 31990), (138, 31981), (141, 31954), (149, 31879), (154, 31849), (162, 31795),

Gene: BabyGotBac_41 Start: 32623, Stop: 31679, Start Num: 26
Candidate Starts for BabyGotBac_41:
(8, 32728), (11, 32680), (12, 32668), (14, 32665), (Start: 26 @32623 has 8 MA's), (29, 32614), (62, 32437), (70, 32365), (74, 32341), (99, 32194), (105, 32173), (112, 32128), (119, 32074), (137, 31990), (138, 31981), (141, 31954), (154, 31849), (162, 31795),

Gene: BayC_40 Start: 32623, Stop: 31679, Start Num: 26
Candidate Starts for BayC_40:
(8, 32728), (11, 32680), (12, 32668), (14, 32665), (Start: 26 @32623 has 8 MA's), (29, 32614), (62, 32437), (70, 32365), (74, 32341), (99, 32194), (105, 32173), (112, 32128), (119, 32074), (137, 31990), (138, 31981), (141, 31954), (149, 31879), (154, 31849), (162, 31795),

Gene: ChewyVIII_75 Start: 55068, Stop: 53818, Start Num: 24
Candidate Starts for ChewyVIII_75:
(Start: 24 @55068 has 1 MA's), (50, 54921), (56, 54894), (70, 54792), (76, 54762), (80, 54729), (99, 54624), (109, 54570), (113, 54555), (114, 54534), (117, 54510), (121, 54492), (137, 54399), (146, 54312), (161, 54213), (164, 54177), (173, 54132), (178, 54042), (191, 53910), (195, 53829), (196, 53826),

Gene: Crewmate_52 Start: 34132, Stop: 35106, Start Num: 27
Candidate Starts for Crewmate_52:
(7, 34009), (Start: 27 @34132 has 6 MA's), (42, 34216), (47, 34252), (66, 34351), (86, 34477), (98, 34537), (107, 34579), (137, 34774), (148, 34885),

Gene: Cueylyss_44 Start: 34031, Stop: 32712, Start Num: 13
Candidate Starts for Cueylyss_44:
(Start: 13 @34031 has 1 MA's), (38, 33896), (42, 33881), (45, 33869), (49, 33836), (52, 33824), (53, 33815), (66, 33725), (68, 33707), (71, 33686), (72, 33683), (75, 33662), (76, 33659), (79, 33635), (92, 33542), (96, 33530), (109, 33458), (115, 33413), (131, 33317), (134, 33302), (147, 33185), (185, 32825), (186, 32813), (194, 32720),

Gene: Exile_42 Start: 36122, Stop: 36952, Start Num: 64
Candidate Starts for Exile_42:
(10, 35837), (17, 35879), (18, 35888), (Start: 40 @35993 has 1 MA's), (43, 36005), (51, 36053), (52, 36059), (64, 36122), (67, 36158), (72, 36191), (73, 36200), (75, 36212), (91, 36323), (94, 36335), (117, 36473), (137, 36572), (154, 36731), (157, 36767), (159, 36788),

Gene: Hirko_3 Start: 1965, Stop: 3029, Start Num: 21
Candidate Starts for Hirko_3:
(Start: 21 @1965 has 2 MA's), (42, 2058), (55, 2145), (62, 2202), (66, 2238), (71, 2277), (83, 2349), (98, 2424), (99, 2433), (107, 2466), (112, 2499), (123, 2574), (133, 2640), (160, 2847), (167, 2907),

Gene: JuneStar_49 Start: 36072, Stop: 37253, Start Num: 27
Candidate Starts for JuneStar_49:
(Start: 27 @36072 has 6 MA's), (42, 36156), (47, 36192), (66, 36288), (71, 36327), (86, 36414), (93, 36459), (107, 36516), (137, 36708), (140, 36732), (143, 36756), (180, 37116),

Gene: MaGuCo_45 Start: 34507, Stop: 35697, Start Num: 22
Candidate Starts for MaGuCo_45:
(Start: 22 @34507 has 1 MA's), (Start: 27 @34516 has 6 MA's), (42, 34600), (47, 34636), (61, 34687), (66, 34732), (71, 34771), (81, 34834), (107, 34960), (114, 35017), (137, 35152), (140, 35176), (151, 35287), (172, 35446), (183, 35602), (192, 35686),

Gene: Maih_39 Start: 32622, Stop: 31678, Start Num: 26
Candidate Starts for Maih_39:
(8, 32727), (11, 32679), (12, 32667), (14, 32664), (Start: 26 @32622 has 8 MA's), (29, 32613), (62, 32436), (70, 32364), (74, 32340), (99, 32193), (105, 32172), (112, 32127), (119, 32073), (137, 31989), (138, 31980), (141, 31953), (149, 31878), (154, 31848), (162, 31794),

Gene: Min1_17 Start: 7577, Stop: 8530, Start Num: 20
Candidate Starts for Min1_17:
(1, 7247), (20, 7577), (44, 7682), (47, 7709), (66, 7811), (71, 7850), (82, 7916), (101, 8015), (106, 8036), (109, 8060), (114, 8096), (119, 8126), (123, 8147), (133, 8213), (136, 8225), (137, 8231), (139, 8243), (140, 8255), (142, 8273), (166, 8483), (170, 8498), (175, 8519),

Gene: Omnicron_74 Start: 50751, Stop: 51713, Start Num: 25
Candidate Starts for Omnicron_74:
(Start: 25 @50751 has 2 MA's), (36, 50829), (45, 50859), (64, 50958), (65, 50973), (69, 51018), (72, 51027), (81, 51090), (89, 51123), (97, 51171), (102, 51198), (103, 51201), (104, 51204), (113, 51255), (116, 51288), (128, 51366), (130, 51372), (138, 51408), (145, 51465), (152, 51543), (163, 51618), (165, 51654), (174, 51696),

Gene: Pine5_74 Start: 54534, Stop: 55667, Start Num: 26
Candidate Starts for Pine5_74:
(15, 54501), (Start: 26 @54534 has 8 MA's), (30, 54546), (31, 54552), (34, 54585), (35, 54591), (81, 54882), (93, 54954), (98, 54966), (100, 54981), (110, 55032), (111, 55035), (119, 55095), (136, 55194), (137, 55200), (140, 55224),

Gene: Pitbull_54 Start: 30102, Stop: 31100, Start Num: 16
Candidate Starts for Pitbull_54:
(Start: 16 @30102 has 1 MA's), (Start: 22 @30120 has 1 MA's), (23, 30123), (29, 30138), (37, 30213), (63, 30333), (94, 30546), (118, 30678), (125, 30732), (155, 30933), (156, 30942), (168, 31035), (169, 31041), (171, 31047),

Gene: Pixelle_48 Start: 35564, Stop: 36538, Start Num: 27
Candidate Starts for Pixelle_48:
(7, 35441), (Start: 27 @35564 has 6 MA's), (42, 35648), (47, 35684), (66, 35783), (86, 35909), (98, 35969), (107, 36011), (137, 36206), (148, 36317),

Gene: Pumpkins_46 Start: 33990, Stop: 34940, Start Num: 27
Candidate Starts for Pumpkins_46:
(Start: 27 @33990 has 6 MA's), (42, 34074), (47, 34110), (87, 34338), (99, 34404), (107, 34437), (119, 34524), (158, 34794),

Gene: RainyPolka_41 Start: 32578, Stop: 31634, Start Num: 26
Candidate Starts for RainyPolka_41:
(11, 32635), (14, 32620), (Start: 26 @32578 has 8 MA's), (29, 32569), (74, 32296), (75, 32293), (77, 32278), (78, 32269), (94, 32170), (99, 32149), (112, 32083), (117, 32035), (119, 32029), (122, 32011), (129, 31975), (132, 31963), (136, 31951), (137, 31945), (138, 31936), (141, 31909), (150, 31822), (154, 31804), (162, 31750),

Gene: Rando14_73 Start: 49427, Stop: 50389, Start Num: 25
Candidate Starts for Rando14_73:
(Start: 25 @49427 has 2 MA's), (45, 49535), (64, 49634), (65, 49649), (69, 49694), (72, 49703), (81, 49766), (89, 49799), (97, 49847), (102, 49874), (103, 49877), (104, 49880), (113, 49931), (116, 49964), (120, 49988), (126, 50030), (130, 50048), (138, 50084), (145, 50141), (152, 50219), (163, 50294), (165, 50330),

Gene: Salete_40 Start: 32623, Stop: 31679, Start Num: 26
Candidate Starts for Salete_40:
(8, 32728), (11, 32680), (12, 32668), (14, 32665), (Start: 26 @32623 has 8 MA's), (29, 32614), (62, 32437), (70, 32365), (74, 32341), (99, 32194), (105, 32173), (112, 32128), (119, 32074), (137, 31990),

(138, 31981), (141, 31954), (149, 31879), (154, 31849), (162, 31795),

Gene: Soondubu_44 Start: 36476, Stop: 37435, Start Num: 40
Candidate Starts for Soondubu_44:
(Start: 40 @36476 has 1 MA's), (43, 36488), (51, 36536), (52, 36542), (64, 36605), (67, 36641), (72, 36674), (73, 36683), (75, 36695), (91, 36806), (94, 36818), (117, 36956), (137, 37055), (154, 37214), (157, 37250), (159, 37271),

Gene: TP1604_40 Start: 32623, Stop: 31679, Start Num: 26
Candidate Starts for TP1604_40:
(8, 32728), (11, 32680), (12, 32668), (14, 32665), (Start: 26 @32623 has 8 MA's), (29, 32614), (62, 32437), (70, 32365), (74, 32341), (99, 32194), (105, 32173), (112, 32128), (119, 32074), (137, 31990), (138, 31981), (141, 31954), (154, 31849), (162, 31795),

Gene: Tian_46 Start: 35220, Stop: 36194, Start Num: 27
Candidate Starts for Tian_46:
(7, 35097), (Start: 27 @35220 has 6 MA's), (42, 35304), (47, 35340), (66, 35439), (86, 35565), (98, 35625), (107, 35667), (137, 35862), (148, 35973),

Gene: TurkishDelight_123 Start: 90090, Stop: 91361, Start Num: 32
Candidate Starts for TurkishDelight_123:
(Start: 25 @90051 has 2 MA's), (31, 90072), (Start: 32 @90090 has 1 MA's), (41, 90150), (46, 90180), (58, 90267), (59, 90282), (71, 90378), (77, 90417), (78, 90426), (84, 90471), (108, 90591), (127, 90747), (133, 90771), (135, 90780), (144, 90846), (149, 90912), (177, 91155), (181, 91230), (188, 91287), (189, 91290), (190, 91293), (193, 91353),

Gene: Vibaki_4 Start: 2231, Stop: 3478, Start Num: 21
Candidate Starts for Vibaki_4:
(2, 2012), (5, 2060), (Start: 21 @2231 has 2 MA's), (42, 2327), (47, 2363), (55, 2414), (60, 2453), (62, 2471), (66, 2507), (71, 2546), (83, 2618), (99, 2702), (107, 2735), (109, 2756), (112, 2768), (123, 2843), (176, 3242), (179, 3287), (187, 3362),

Gene: YDN12_41 Start: 32025, Stop: 31081, Start Num: 26
Candidate Starts for YDN12_41:
(9, 32088), (Start: 26 @32025 has 8 MA's), (29, 32016), (52, 31878), (71, 31764), (74, 31743), (80, 31704), (99, 31596), (105, 31575), (112, 31530), (119, 31476), (136, 31398), (137, 31392), (141, 31356), (149, 31281), (150, 31269), (153, 31254), (154, 31251),

Gene: Yang_47 Start: 33687, Stop: 34649, Start Num: 27
Candidate Starts for Yang_47:
(Start: 27 @33687 has 6 MA's), (42, 33771), (47, 33807), (57, 33855), (90, 34056), (93, 34089), (107, 34146), (114, 34203),

Gene: pZL12_28c Start: 19291, Stop: 18185, Start Num: 19
Candidate Starts for pZL12_28c:
(19, 19291), (37, 19198), (39, 19192), (48, 19141), (63, 19078), (84, 18925), (88, 18910), (95, 18871), (98, 18862), (99, 18853), (109, 18799), (136, 18640), (137, 18634),

Gene: pZL12_27c Start: 18188, Stop: 17142, Start Num: 28
Candidate Starts for pZL12_27c:
(28, 18188), (33, 18149), (36, 18122), (54, 18032), (80, 17873), (136, 17546), (137, 17540), (140, 17516), (182, 17180), (184, 17174),