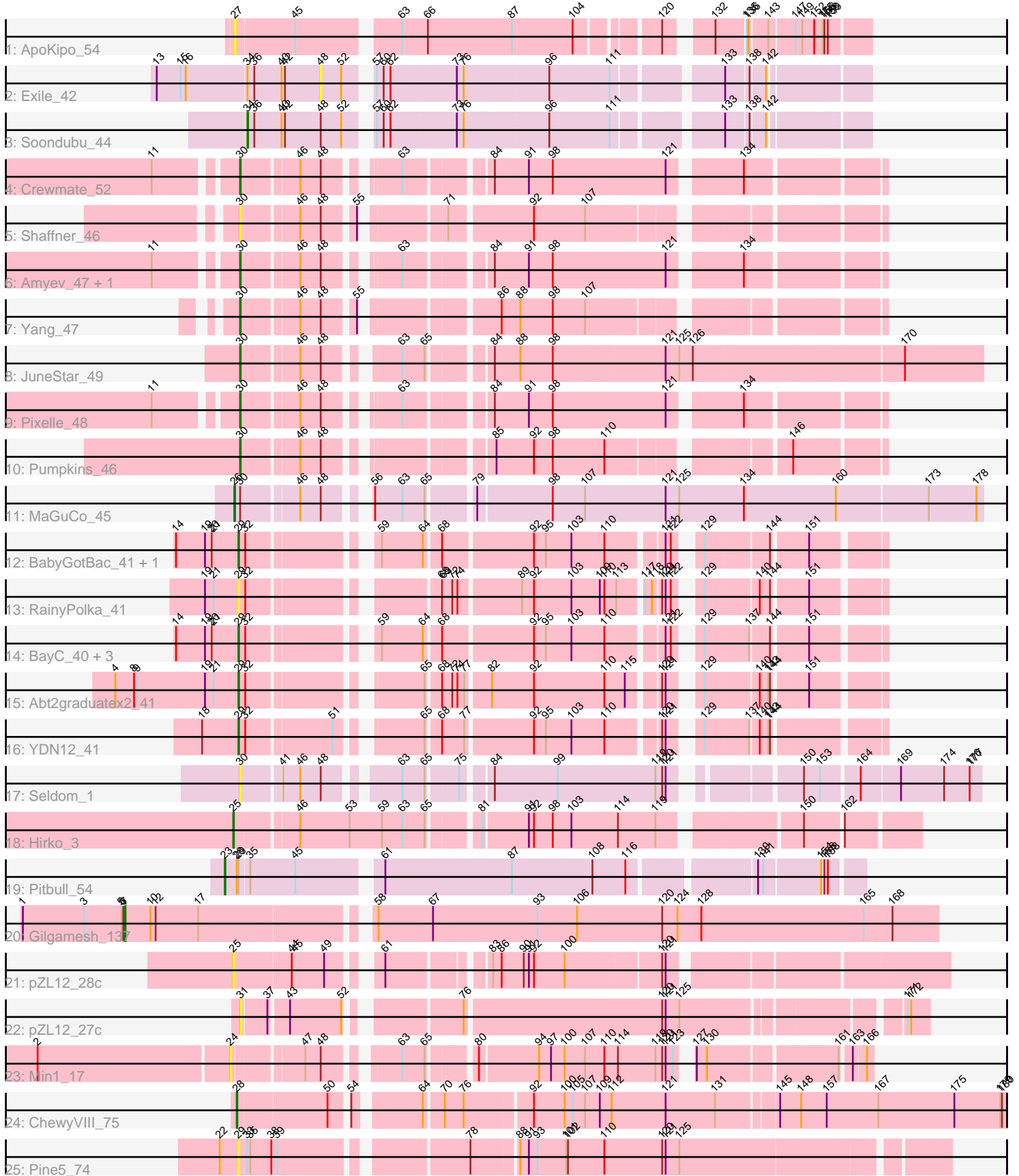


Pham 224804



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 224804 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224804 has 30 members, 10 are drafts.

Phages represented in each track:

- Track 1 : ApoKipo_54
- Track 2 : Exile_42
- Track 3 : Soondubu_44
- Track 4 : Crewmate_52
- Track 5 : Shaffner_46
- Track 6 : Amyev_47, Tian_46
- Track 7 : Yang_47
- Track 8 : JuneStar_49
- Track 9 : Pixelle_48
- Track 10 : Pumpkins_46
- Track 11 : MaGuCo_45
- Track 12 : BabyGotBac_41, TP1604_40
- Track 13 : RainyPolka_41
- Track 14 : BayC_40, Asis_40, Salete_40, Maih_39
- Track 15 : Abt2graduatex2_41
- Track 16 : YDN12_41
- Track 17 : Seldom_1
- Track 18 : Hirko_3
- Track 19 : Pitbull_54
- Track 20 : Gilgamesh_137
- Track 21 : pZL12_28c
- Track 22 : pZL12_27c
- Track 23 : Min1_17
- Track 24 : ChewyVIII_75
- Track 25 : 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 29, it was called in 8 of the 20 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:

- Pitbull_54,

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

- Amyev_47, ApoKipo_54, ChewyVIII_75, Crewmate_52, Exile_42, Gilgamesh_137, Hirko_3, JuneStar_49, MaGuCo_45, Min1_17, Pixelle_48, Pumpkins_46, Seldom_1, Shaffner_46, Soondubu_44, Tian_46, Yang_47, pZL12_27c, pZL12_28c,

Summary by start number:

Start 7:

- Found in 1 of 30 (3.3%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gilgamesh_137 (singleton),

Start 23:

- Found in 1 of 30 (3.3%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pitbull_54 (FQ),

Start 24:

- Found in 1 of 30 (3.3%) 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 25:

- Found in 2 of 30 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hirko_3 (FL), pZL12_28c (singleton),

Start 26:

- Found in 1 of 30 (3.3%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MaGuCo_45 (AZ2),

Start 27:

- Found in 1 of 30 (3.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ApoKipo_54 (AL),

Start 28:

- Found in 2 of 30 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ChewyVIII_75 (singleton),

Start 29:

- Found in 11 of 30 (36.7%) of genes in pham
- Manual Annotations of this start: 8 of 20
- Called 90.9% 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 30:

- Found in 10 of 30 (33.3%) of genes in pham
- Manual Annotations of this start: 6 of 20
- Called 90.0% 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), Seldom_1 (FD), Shaffner_46 (AZ1), Tian_46 (AZ1), Yang_47 (AZ1),

Start 31:

- Found in 1 of 30 (3.3%) 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 34:

- Found in 2 of 30 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Soondubu_44 (AZ),

Start 48:

- Found in 13 of 30 (43.3%) of genes in pham
- No Manual Annotations of this start.
- Called 7.7% 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, AL, FD, AZ1, AZ2, AZ, FL,

Info for manual annotations of cluster AZ:

- Start number 34 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ1:

- Start number 30 was manually annotated 6 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 26 was manually annotated 1 time for cluster AZ2.

Info for manual annotations of cluster BG:

- Start number 29 was manually annotated 8 times for cluster BG.

Info for manual annotations of cluster FL:

- Start number 25 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster FQ:

- Start number 23 was manually annotated 1 time for cluster FQ.

Gene Information:

Gene: Abt2graduatex2_41 Start: 32795, Stop: 31851, Start Num: 29

Candidate Starts for Abt2graduatex2_41:

(4, 33008), (8, 32975), (9, 32969), (19, 32852), (21, 32837), (Start: 29 @32795 has 8 MA's), (32, 32786), (65, 32534), (68, 32513), (72, 32495), (74, 32486), (77, 32474), (82, 32438), (92, 32366), (110, 32246), (115, 32213), (120, 32168), (121, 32162), (129, 32126), (140, 32039), (143, 32024), (144, 32021), (151, 31967),

Gene: Amyev_47 Start: 35220, Stop: 36194, Start Num: 30

Candidate Starts for Amyev_47:

(11, 35097), (Start: 30 @35220 has 6 MA's), (46, 35304), (48, 35340), (63, 35439), (84, 35565), (91, 35625), (98, 35667), (121, 35862), (134, 35973),

Gene: ApoKipo_54 Start: 30521, Stop: 31468, Start Num: 27

Candidate Starts for ApoKipo_54:

(27, 30521), (45, 30617), (63, 30770), (66, 30812), (87, 30953), (104, 31052), (120, 31166), (132, 31226), (135, 31274), (136, 31277), (143, 31304), (147, 31346), (149, 31355), (152, 31376), (155, 31391), (156, 31394), (158, 31400), (159, 31403),

Gene: Asis_40 Start: 32623, Stop: 31679, Start Num: 29

Candidate Starts for Asis_40:

(14, 32728), (19, 32680), (20, 32668), (21, 32665), (Start: 29 @32623 has 8 MA's), (32, 32614), (59, 32437), (64, 32365), (68, 32341), (92, 32194), (95, 32173), (103, 32128), (110, 32074), (121, 31990), (122, 31981), (129, 31954), (137, 31879), (144, 31849), (151, 31795),

Gene: BabyGotBac_41 Start: 32623, Stop: 31679, Start Num: 29

Candidate Starts for BabyGotBac_41:

(14, 32728), (19, 32680), (20, 32668), (21, 32665), (Start: 29 @32623 has 8 MA's), (32, 32614), (59, 32437), (64, 32365), (68, 32341), (92, 32194), (95, 32173), (103, 32128), (110, 32074), (121, 31990), (122, 31981), (129, 31954), (144, 31849), (151, 31795),

Gene: BayC_40 Start: 32623, Stop: 31679, Start Num: 29

Candidate Starts for BayC_40:

(14, 32728), (19, 32680), (20, 32668), (21, 32665), (Start: 29 @32623 has 8 MA's), (32, 32614), (59, 32437), (64, 32365), (68, 32341), (92, 32194), (95, 32173), (103, 32128), (110, 32074), (121, 31990), (122, 31981), (129, 31954), (137, 31879), (144, 31849), (151, 31795),

Gene: ChewyVIII_75 Start: 55068, Stop: 53818, Start Num: 28

Candidate Starts for ChewyVIII_75:

(Start: 28 @55068 has 1 MA's), (50, 54921), (54, 54894), (64, 54792), (70, 54762), (76, 54729), (92, 54624), (100, 54570), (105, 54555), (107, 54534), (109, 54510), (112, 54492), (121, 54399), (131, 54312), (145, 54213), (148, 54177), (157, 54132), (167, 54042), (175, 53910), (179, 53829), (180, 53826),

Gene: Crewmate_52 Start: 34132, Stop: 35106, Start Num: 30

Candidate Starts for Crewmate_52:

(11, 34009), (Start: 30 @34132 has 6 MA's), (46, 34216), (48, 34252), (63, 34351), (84, 34477), (91, 34537), (98, 34579), (121, 34774), (134, 34885),

Gene: Exile_42 Start: 36122, Stop: 36952, Start Num: 48

Candidate Starts for Exile_42:

(13, 35837), (15, 35879), (16, 35888), (Start: 34 @35993 has 1 MA's), (36, 36005), (40, 36053), (42, 36059), (48, 36122), (52, 36158), (57, 36191), (60, 36200), (62, 36212), (73, 36323), (76, 36335), (96, 36473), (111, 36572), (133, 36731), (138, 36767), (142, 36788),

Gene: Gilgamesh_137 Start: 118223, Stop: 119593, Start Num: 7

Candidate Starts for Gilgamesh_137:

(1, 118043), (3, 118151), (5, 118217), (6, 118220), (Start: 7 @118223 has 1 MA's), (10, 118268), (12, 118277), (17, 118352), (58, 118619), (67, 118715), (93, 118898), (106, 118964), (120, 119111), (124, 119138), (128, 119180), (165, 119462), (168, 119513),

Gene: Hirko_3 Start: 1965, Stop: 3029, Start Num: 25

Candidate Starts for Hirko_3:

(Start: 25 @1965 has 1 MA's), (46, 2058), (53, 2145), (59, 2202), (63, 2238), (65, 2277), (81, 2349), (91, 2424), (92, 2433), (98, 2466), (103, 2499), (114, 2574), (119, 2640), (150, 2847), (162, 2907),

Gene: JuneStar_49 Start: 36072, Stop: 37253, Start Num: 30

Candidate Starts for JuneStar_49:

(Start: 30 @36072 has 6 MA's), (46, 36156), (48, 36192), (63, 36288), (65, 36327), (84, 36414), (88, 36459), (98, 36516), (121, 36708), (125, 36732), (126, 36756), (170, 37116),

Gene: MaGuCo_45 Start: 34507, Stop: 35697, Start Num: 26

Candidate Starts for MaGuCo_45:

(Start: 26 @34507 has 1 MA's), (Start: 30 @34516 has 6 MA's), (46, 34600), (48, 34636), (56, 34687), (63, 34732), (65, 34771), (79, 34834), (98, 34960), (107, 35017), (121, 35152), (125, 35176), (134, 35287), (160, 35446), (173, 35602), (178, 35686),

Gene: Maih_39 Start: 32622, Stop: 31678, Start Num: 29

Candidate Starts for Maih_39:

(14, 32727), (19, 32679), (20, 32667), (21, 32664), (Start: 29 @32622 has 8 MA's), (32, 32613), (59, 32436), (64, 32364), (68, 32340), (92, 32193), (95, 32172), (103, 32127), (110, 32073), (121, 31989), (122, 31980), (129, 31953), (137, 31878), (144, 31848), (151, 31794),

Gene: Min1_17 Start: 7577, Stop: 8530, Start Num: 24

Candidate Starts for Min1_17:

(2, 7247), (24, 7577), (47, 7682), (48, 7709), (63, 7811), (65, 7850), (80, 7916), (94, 8015), (97, 8036), (100, 8060), (107, 8096), (110, 8126), (114, 8147), (119, 8213), (120, 8225), (121, 8231), (123, 8243), (127, 8255), (130, 8273), (161, 8483), (163, 8498), (166, 8519),

Gene: Pine5_74 Start: 54534, Stop: 55667, Start Num: 29

Candidate Starts for Pine5_74:

(22, 54501), (Start: 29 @54534 has 8 MA's), (33, 54546), (35, 54552), (38, 54585), (39, 54591), (78, 54882), (88, 54954), (91, 54966), (93, 54981), (101, 55032), (102, 55035), (110, 55095), (120, 55194), (121, 55200), (125, 55224),

Gene: Pitbull_54 Start: 30102, Stop: 31100, Start Num: 23

Candidate Starts for Pitbull_54:

(Start: 23 @30102 has 1 MA's), (Start: 28 @30120 has 1 MA's), (Start: 29 @30123 has 8 MA's), (35, 30138), (45, 30213), (61, 30333), (87, 30546), (108, 30678), (116, 30732), (139, 30933), (141, 30942), (154, 31035), (156, 31041), (158, 31047),

Gene: Pixelle_48 Start: 35564, Stop: 36538, Start Num: 30

Candidate Starts for Pixelle_48:

(11, 35441), (Start: 30 @35564 has 6 MA's), (46, 35648), (48, 35684), (63, 35783), (84, 35909), (91, 35969), (98, 36011), (121, 36206), (134, 36317),

Gene: Pumpkins_46 Start: 33990, Stop: 34940, Start Num: 30

Candidate Starts for Pumpkins_46:

(Start: 30 @33990 has 6 MA's), (46, 34074), (48, 34110), (85, 34338), (92, 34404), (98, 34437), (110, 34524), (146, 34794),

Gene: RainyPolka_41 Start: 32578, Stop: 31634, Start Num: 29

Candidate Starts for RainyPolka_41:

(19, 32635), (21, 32620), (Start: 29 @32578 has 8 MA's), (32, 32569), (68, 32296), (69, 32293), (72, 32278), (74, 32269), (89, 32170), (92, 32149), (103, 32083), (109, 32035), (110, 32029), (113, 32011), (117, 31975), (118, 31963), (120, 31951), (121, 31945), (122, 31936), (129, 31909), (140, 31822), (144, 31804), (151, 31750),

Gene: Salete_40 Start: 32623, Stop: 31679, Start Num: 29

Candidate Starts for Salete_40:

(14, 32728), (19, 32680), (20, 32668), (21, 32665), (Start: 29 @32623 has 8 MA's), (32, 32614), (59, 32437), (64, 32365), (68, 32341), (92, 32194), (95, 32173), (103, 32128), (110, 32074), (121, 31990), (122, 31981), (129, 31954), (137, 31879), (144, 31849), (151, 31795),

Gene: Seldom_1 Start: 1247, Stop: 138, Start Num: 30

Candidate Starts for Seldom_1:

(Start: 30 @1247 has 6 MA's), (41, 1193), (46, 1163), (48, 1127), (63, 1025), (65, 986), (75, 941), (84, 899), (99, 788), (119, 620), (120, 608), (121, 602), (150, 425), (153, 398), (164, 341), (169, 275), (174, 203), (176, 158), (177, 155),

Gene: Shaffner_46 Start: 33959, Stop: 34921, Start Num: 30

Candidate Starts for Shaffner_46:

(Start: 30 @33959 has 6 MA's), (46, 34043), (48, 34079), (55, 34127), (71, 34250), (92, 34385), (107, 34475),

Gene: Soondubu_44 Start: 36476, Stop: 37435, Start Num: 34

Candidate Starts for Soondubu_44:

(Start: 34 @36476 has 1 MA's), (36, 36488), (40, 36536), (42, 36542), (48, 36605), (52, 36641), (57, 36674), (60, 36683), (62, 36695), (73, 36806), (76, 36818), (96, 36956), (111, 37055), (133, 37214), (138, 37250), (142, 37271),

Gene: TP1604_40 Start: 32623, Stop: 31679, Start Num: 29

Candidate Starts for TP1604_40:

(14, 32728), (19, 32680), (20, 32668), (21, 32665), (Start: 29 @32623 has 8 MA's), (32, 32614), (59, 32437), (64, 32365), (68, 32341), (92, 32194), (95, 32173), (103, 32128), (110, 32074), (121, 31990), (122, 31981), (129, 31954), (144, 31849), (151, 31795),

Gene: Tian_46 Start: 35220, Stop: 36194, Start Num: 30

Candidate Starts for Tian_46:

(11, 35097), (Start: 30 @35220 has 6 MA's), (46, 35304), (48, 35340), (63, 35439), (84, 35565), (91, 35625), (98, 35667), (121, 35862), (134, 35973),

Gene: YDN12_41 Start: 32025, Stop: 31081, Start Num: 29

Candidate Starts for YDN12_41:

(18, 32088), (Start: 29 @32025 has 8 MA's), (32, 32016), (51, 31878), (65, 31764), (68, 31743), (77, 31704), (92, 31596), (95, 31575), (103, 31530), (110, 31476), (120, 31398), (121, 31392), (129, 31356), (137, 31281), (140, 31269), (143, 31254), (144, 31251),

Gene: Yang_47 Start: 33687, Stop: 34649, Start Num: 30

Candidate Starts for Yang_47:

(Start: 30 @33687 has 6 MA's), (46, 33771), (48, 33807), (55, 33855), (86, 34056), (88, 34089), (98, 34146), (107, 34203),

Gene: pZL12_28c Start: 19291, Stop: 18185, Start Num: 25

Candidate Starts for pZL12_28c:

(Start: 25 @19291 has 1 MA's), (44, 19198), (45, 19192), (49, 19141), (61, 19078), (83, 18925), (86, 18910), (90, 18871), (91, 18862), (92, 18853), (100, 18799), (120, 18640), (121, 18634),

Gene: pZL12_27c Start: 18188, Stop: 17142, Start Num: 31

Candidate Starts for pZL12_27c:

(31, 18188), (37, 18149), (43, 18122), (52, 18032), (76, 17873), (120, 17546), (121, 17540), (125, 17516), (171, 17180), (172, 17174),