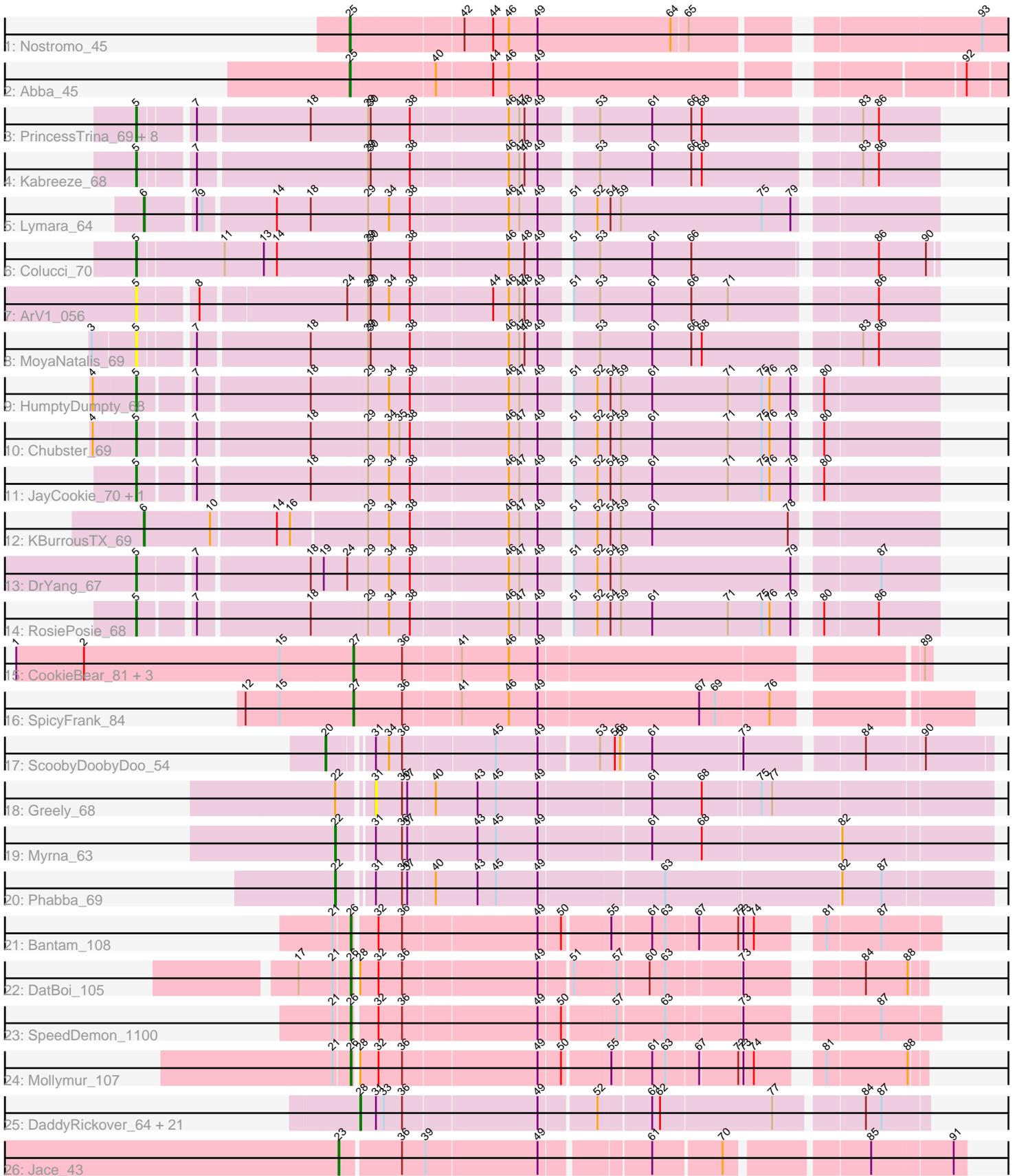# Pham 291187

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 291187 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291187 has 59 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Nostromo_45
• Track 2 : Abba_45
• Track 3 : PrincessTrina_69, Chocolat_68, Conboy_67, EdgarPoe_67, JaNo_68, Scavito_69, Chipper1996_690, Tophat_69, Mordred_68
• Track 4 : Kabreeze_68
• Track 5 : Lymara_64
• Track 6 : Colucci_70
• Track 7 : ArV1_056
• Track 8 : MoyaNatalis_69
• Track 9 : HumptyDumpty_68
• Track 10 : Chubster_69
• Track 11 : JayCookie_70, Linus_68
• Track 12 : KBurrousTX_69
• Track 13 : DrYang_67
• Track 14 : RosiePosie_68
• Track 15 : CookieBear_81, SonDevVon_90, Sakai_79, Gorpy_80
• Track 16 : SpicyFrank_84
• Track 17 : ScoobyDoobyDoo_54
• Track 18 : Greely_68
• Track 19 : Myrna_63
• Track 20 : Phabba_69
• Track 21 : Bantam_108
• Track 22 : DatBoi_105
• Track 23 : SpeedDemon_1100
• Track 24 : Mollymur_107
• Track 25 : DaddyRickover_64, Dorothy_63, Scottish_63, Sassafras_63, Polka14_63, Daenerys_59, KingMidas_64, Empress_63, Deb65_59, IbOuu_64, JoeyJr_60, PHappiness_60, Nimbo_58, Stap_62, OldBen_62, Leperchaun_57, Inventum_60, Geralt_59, RitaG_60, RedBird_63, Spoonbill_62, BodEinwohner17_65
• Track 26 : Jace_43

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

The start number called the most often in the published annotations is 28, it was called in 21 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BodEinwohner17_65, DaddyRickover_64, Daenerys_59, Deb65_59, Dorothy_63, Empress_63, Geralt_59, IbOuu_64, Inventum_60, JoeyJr_60, KingMidas_64, Leperchaun_57, Nimbo_58, OldBen_62, PHappiness_60, Polka14_63, RedBird_63, RitaG_60, Sassafras_63, Scottish_63, Spoonbill_62, Stap_62,

Genes that have the "Most Annotated" start but do not call it:
• DatBoi_105, Mollymur_107,

Genes that do not have the "Most Annotated" start:
• Abba_45, ArV1_056, Bantam_108, Chipper1996_690, Chocolat_68, Chubster_69, Colucci_70, Conboy_67, CookieBear_81, DrYang_67, EdgarPoe_67, Gorpy_80, Greely_68, HumptyDumpty_68, JaNo_68, Jace_43, JayCookie_70, KBurrousTX_69, Kabreeze_68, Linus_68, Lymara_64, Mordred_68, MoyaNatalis_69, Myrna_63, Nostromo_45, Phabba_69, PrincessTrina_69, RosiePosie_68, Sakai_79, Scavito_69, ScoobyDooByDoo_54, SonDevVon_90, SpeedDemon_1100, SpicyFrank_84, Tophat_69,

Summary by start number:

Start 5:
• Found in 19 of 59 (32.2%) of genes in pham
• Manual Annotations of this start: 17 of 54
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ArV1_056 (AR), Chipper1996_690 (AR), Chocolat_68 (AR), Chubster_69 (AR), Colucci_70 (AR), Conboy_67 (AR), DrYang_67 (AR), EdgarPoe_67 (AR), HumptyDumpty_68 (AR), JaNo_68 (AR), JayCookie_70 (AR), Kabreeze_68 (AR), Linus_68 (AR), Mordred_68 (AR), MoyaNatalis_69 (AR), PrincessTrina_69 (AR), RosiePosie_68 (AR), Scavito_69 (AR), Tophat_69 (AR),

Start 6:
• Found in 2 of 59 (3.4%) of genes in pham
• Manual Annotations of this start: 2 of 54
• Called 100.0% of time when present
• Phage (with cluster) where this start called: KBurrousTX_69 (AR), Lymara_64 (AR),

Start 20:
• Found in 1 of 59 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 54
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ScoobyDooByDoo_54 (C2),

Start 22:
• Found in 3 of 59 (5.1%) of genes in pham
• Manual Annotations of this start: 2 of 54
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Myrna_63 (C2), Phabba_69 (C2),

Start 23:
• Found in 1 of 59 (1.7%) of genes in pham

- Manual Annotations of this start: 1 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace_43 (singleton),

Start 25:
- Found in 2 of 59 (3.4%) of genes in pham
- Manual Annotations of this start: 2 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abba_45 (AO3), Nostromo_45 (AO3),

Start 26:
- Found in 4 of 59 (6.8%) of genes in pham
- Manual Annotations of this start: 4 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam_108 (DL), DatBoi_105 (DL), Mollymur_107 (DL), SpeedDemon_1100 (DL),

Start 27:
- Found in 5 of 59 (8.5%) of genes in pham
- Manual Annotations of this start: 4 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CookieBear_81 (AY), Gorpy_80 (AY), Sakai_79 (AY), SonDevVon_90 (AY), SpicyFrank_84 (AY),

Start 28:
- Found in 24 of 59 (40.7%) of genes in pham
- Manual Annotations of this start: 21 of 54
- Called 91.7% of time when present
- Phage (with cluster) where this start called: BodEinwohner17_65 (F1), DaddyRickover_64 (F1), Daenerys_59 (F1), Deb65_59 (F1), Dorothy_63 (F1), Empress_63 (F1), Geralt_59 (F1), IbOuu_64 (F1), Inventum_60 (F1), JoeyJr_60 (F1), KingMidas_64 (F1), Leperchaun_57 (F1), Nimbo_58 (F1), OldBen_62 (F1), PHappiness_60 (F1), Polka14_63 (F1), RedBird_63 (F1), RitaG_60 (F1), Sassafras_63 (F1), Scottish_63 (F1), Spoonbill_62 (F1), Stap_62 (F1),

Start 31:
- Found in 26 of 59 (44.1%) of genes in pham
- No Manual Annotations of this start.
- Called 3.8% of time when present
- Phage (with cluster) where this start called: Greely_68 (C2),

Summary by clusters:

There are 7 clusters represented in this pham: F1, DL, singleton, AR, AO3, AY, C2,

Info for manual annotations of cluster AO3:
- Start number 25 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster AR:
- Start number 5 was manually annotated 17 times for cluster AR.
- Start number 6 was manually annotated 2 times for cluster AR.

Info for manual annotations of cluster AY:

•Start number 27 was manually annotated 4 times for cluster AY.

Info for manual annotations of cluster C2:
•Start number 20 was manually annotated 1 time for cluster C2.
•Start number 22 was manually annotated 2 times for cluster C2.

Info for manual annotations of cluster DL:
•Start number 26 was manually annotated 4 times for cluster DL.

Info for manual annotations of cluster F1:
•Start number 28 was manually annotated 21 times for cluster F1.

Gene Information:

Gene: Abba_45 Start: 33459, Stop: 34169, Start Num: 25
Candidate Starts for Abba_45:
(Start: 25 @33459 has 2 MA's), (40, 33552), (44, 33615), (46, 33633), (49, 33666), (92, 34110),

Gene: ArV1_056 Start: 45051, Stop: 45908, Start Num: 5
Candidate Starts for ArV1_056:
(Start: 5 @45051 has 17 MA's), (8, 45111), (24, 45270), (29, 45294), (30, 45297), (34, 45318), (38, 45342), (44, 45432), (46, 45450), (47, 45462), (48, 45468), (49, 45483), (51, 45510), (53, 45540), (61, 45600), (66, 45645), (71, 45687), (86, 45840),

Gene: Bantam_108 Start: 69737, Stop: 70342, Start Num: 26
Candidate Starts for Bantam_108:
(21, 69719), (Start: 26 @69737 has 4 MA's), (32, 69761), (36, 69788), (49, 69938), (50, 69962), (55, 70010), (61, 70052), (63, 70067), (67, 70103), (72, 70145), (73, 70148), (74, 70160), (81, 70217), (87, 70277),

Gene: BodEinwohner17_65 Start: 41919, Stop: 42527, Start Num: 28
Candidate Starts for BodEinwohner17_65:
(Start: 28 @41919 has 21 MA's), (31, 41937), (33, 41946), (36, 41967), (49, 42117), (52, 42177), (61, 42231), (62, 42240), (77, 42366), (84, 42459), (87, 42477),

Gene: Chipper1996_690 Start: 46328, Stop: 47185, Start Num: 5
Candidate Starts for Chipper1996_690:
(Start: 5 @46328 has 17 MA's), (7, 46382), (18, 46505), (29, 46571), (30, 46574), (38, 46619), (46, 46727), (47, 46739), (48, 46745), (49, 46760), (53, 46817), (61, 46877), (66, 46922), (68, 46934), (83, 47099), (86, 47117),

Gene: Chocolat_68 Start: 46353, Stop: 47210, Start Num: 5
Candidate Starts for Chocolat_68:
(Start: 5 @46353 has 17 MA's), (7, 46407), (18, 46530), (29, 46596), (30, 46599), (38, 46644), (46, 46752), (47, 46764), (48, 46770), (49, 46785), (53, 46842), (61, 46902), (66, 46947), (68, 46959), (83, 47124), (86, 47142),

Gene: Chubster_69 Start: 46529, Stop: 47383, Start Num: 5
Candidate Starts for Chubster_69:
(4, 46481), (Start: 5 @46529 has 17 MA's), (7, 46583), (18, 46706), (29, 46769), (34, 46793), (35, 46805), (38, 46817), (46, 46925), (47, 46937), (49, 46958), (51, 46985), (52, 47012), (54, 47027), (59,

47039), (61, 47075), (71, 47162), (75, 47201), (76, 47210), (79, 47234), (80, 47255),

Gene: Colucci_70 Start: 46486, Stop: 47355, Start Num: 5
Candidate Starts for Colucci_70:
(Start: 5 @46486 has 17 MA's), (11, 46582), (13, 46627), (14, 46642), (29, 46747), (30, 46750), (38, 46795), (46, 46903), (48, 46921), (49, 46936), (51, 46963), (53, 46993), (61, 47053), (66, 47098), (86, 47290), (90, 47344),

Gene: Conboy_67 Start: 46192, Stop: 47049, Start Num: 5
Candidate Starts for Conboy_67:
(Start: 5 @46192 has 17 MA's), (7, 46246), (18, 46369), (29, 46435), (30, 46438), (38, 46483), (46, 46591), (47, 46603), (48, 46609), (49, 46624), (53, 46681), (61, 46741), (66, 46786), (68, 46798), (83, 46963), (86, 46981),

Gene: CookieBear_81 Start: 45964, Stop: 46581, Start Num: 27
Candidate Starts for CookieBear_81:
(1, 45577), (2, 45655), (15, 45880), (Start: 27 @45964 has 4 MA's), (36, 46018), (41, 46081), (46, 46135), (49, 46168), (89, 46573),

Gene: DaddyRickover_64 Start: 42482, Stop: 43090, Start Num: 28
Candidate Starts for DaddyRickover_64:
(Start: 28 @42482 has 21 MA's), (31, 42500), (33, 42509), (36, 42530), (49, 42680), (52, 42740), (61, 42794), (62, 42803), (77, 42929), (84, 43022), (87, 43040),

Gene: Daenerys_59 Start: 40724, Stop: 41332, Start Num: 28
Candidate Starts for Daenerys_59:
(Start: 28 @40724 has 21 MA's), (31, 40742), (33, 40751), (36, 40772), (49, 40922), (52, 40982), (61, 41036), (62, 41045), (77, 41171), (84, 41264), (87, 41282),

Gene: DatBoi_105 Start: 69050, Stop: 69637, Start Num: 26
Candidate Starts for DatBoi_105:
(17, 68993), (21, 69032), (Start: 26 @69050 has 4 MA's), (Start: 28 @69053 has 21 MA's), (32, 69074), (36, 69101), (49, 69251), (51, 69284), (57, 69329), (60, 69362), (63, 69380), (73, 69461), (84, 69572), (88, 69620),

Gene: Deb65_59 Start: 40694, Stop: 41302, Start Num: 28
Candidate Starts for Deb65_59:
(Start: 28 @40694 has 21 MA's), (31, 40712), (33, 40721), (36, 40742), (49, 40892), (52, 40952), (61, 41006), (62, 41015), (77, 41141), (84, 41234), (87, 41252),

Gene: Dorothy_63 Start: 41656, Stop: 42264, Start Num: 28
Candidate Starts for Dorothy_63:
(Start: 28 @41656 has 21 MA's), (31, 41674), (33, 41683), (36, 41704), (49, 41854), (52, 41914), (61, 41968), (62, 41977), (77, 42103), (84, 42196), (87, 42214),

Gene: DrYang_67 Start: 47844, Stop: 48704, Start Num: 5
Candidate Starts for DrYang_67:
(Start: 5 @47844 has 17 MA's), (7, 47901), (18, 48024), (19, 48039), (24, 48066), (29, 48090), (34, 48114), (38, 48138), (46, 48246), (47, 48258), (49, 48279), (51, 48306), (52, 48333), (54, 48348), (59, 48360), (79, 48555), (87, 48639),

Gene: EdgarPoe_67 Start: 46192, Stop: 47049, Start Num: 5
Candidate Starts for EdgarPoe_67:

(Start: 5 @46192 has 17 MA's), (7, 46246), (18, 46369), (29, 46435), (30, 46438), (38, 46483), (46, 46591), (47, 46603), (48, 46609), (49, 46624), (53, 46681), (61, 46741), (66, 46786), (68, 46798), (83, 46963), (86, 46981),

Gene: Empress_63 Start: 42138, Stop: 42746, Start Num: 28
Candidate Starts for Empress_63:
(Start: 28 @42138 has 21 MA's), (31, 42156), (33, 42165), (36, 42186), (49, 42336), (52, 42396), (61, 42450), (62, 42459), (77, 42585), (84, 42678), (87, 42696),

Gene: Geralt_59 Start: 40693, Stop: 41301, Start Num: 28
Candidate Starts for Geralt_59:
(Start: 28 @40693 has 21 MA's), (31, 40711), (33, 40720), (36, 40741), (49, 40891), (52, 40951), (61, 41005), (62, 41014), (77, 41140), (84, 41233), (87, 41251),

Gene: Gorpy_80 Start: 47306, Stop: 47923, Start Num: 27
Candidate Starts for Gorpy_80:
(1, 46919), (2, 46997), (15, 47222), (Start: 27 @47306 has 4 MA's), (36, 47360), (41, 47423), (46, 47477), (49, 47510), (89, 47915),

Gene: Greely_68 Start: 24476, Stop: 25159, Start Num: 31
Candidate Starts for Greely_68:
(Start: 22 @24443 has 2 MA's), (31, 24476), (36, 24506), (37, 24512), (40, 24542), (43, 24590), (45, 24611), (49, 24659), (61, 24782), (68, 24839), (75, 24902), (77, 24914),

Gene: HumptyDumpty_68 Start: 46316, Stop: 47170, Start Num: 5
Candidate Starts for HumptyDumpty_68:
(4, 46268), (Start: 5 @46316 has 17 MA's), (7, 46370), (18, 46493), (29, 46556), (34, 46580), (38, 46604), (46, 46712), (47, 46724), (49, 46745), (51, 46772), (52, 46799), (54, 46814), (59, 46826), (61, 46862), (71, 46949), (75, 46988), (76, 46997), (79, 47021), (80, 47042),

Gene: IbOuu_64 Start: 42743, Stop: 43351, Start Num: 28
Candidate Starts for IbOuu_64:
(Start: 28 @42743 has 21 MA's), (31, 42761), (33, 42770), (36, 42791), (49, 42941), (52, 43001), (61, 43055), (62, 43064), (77, 43190), (84, 43283), (87, 43301),

Gene: Inventum_60 Start: 41854, Stop: 42462, Start Num: 28
Candidate Starts for Inventum_60:
(Start: 28 @41854 has 21 MA's), (31, 41872), (33, 41881), (36, 41902), (49, 42052), (52, 42112), (61, 42166), (62, 42175), (77, 42301), (84, 42394), (87, 42412),

Gene: JaNo_68 Start: 46284, Stop: 47141, Start Num: 5
Candidate Starts for JaNo_68:
(Start: 5 @46284 has 17 MA's), (7, 46338), (18, 46461), (29, 46527), (30, 46530), (38, 46575), (46, 46683), (47, 46695), (48, 46701), (49, 46716), (53, 46773), (61, 46833), (66, 46878), (68, 46890), (83, 47055), (86, 47073),

Gene: Jace_43 Start: 30595, Stop: 31251, Start Num: 23
Candidate Starts for Jace_43:
(Start: 23 @30595 has 1 MA's), (36, 30661), (39, 30688), (49, 30814), (61, 30925), (70, 31000), (85, 31147), (91, 31237),

Gene: JayCookie_70 Start: 46917, Stop: 47771, Start Num: 5
Candidate Starts for JayCookie_70:

(Start: 5 @46917 has 17 MA's), (7, 46971), (18, 47094), (29, 47157), (34, 47181), (38, 47205), (46, 47313), (47, 47325), (49, 47346), (51, 47373), (52, 47400), (54, 47415), (59, 47427), (61, 47463), (71, 47550), (75, 47589), (76, 47598), (79, 47622), (80, 47643),

Gene: JoeyJr_60 Start: 40892, Stop: 41500, Start Num: 28
Candidate Starts for JoeyJr_60:
(Start: 28 @40892 has 21 MA's), (31, 40910), (33, 40919), (36, 40940), (49, 41090), (52, 41150), (61, 41204), (62, 41213), (77, 41339), (84, 41432), (87, 41450),

Gene: KBurrousTX_69 Start: 48104, Stop: 48964, Start Num: 6
Candidate Starts for KBurrousTX_69:
(Start: 6 @48104 has 2 MA's), (10, 48179), (14, 48251), (16, 48266), (29, 48350), (34, 48374), (38, 48398), (46, 48506), (47, 48518), (49, 48539), (51, 48566), (52, 48593), (54, 48608), (59, 48620), (61, 48656), (78, 48812),

Gene: Kabreeze_68 Start: 46371, Stop: 47228, Start Num: 5
Candidate Starts for Kabreeze_68:
(Start: 5 @46371 has 17 MA's), (7, 46425), (29, 46614), (30, 46617), (38, 46662), (46, 46770), (47, 46782), (48, 46788), (49, 46803), (53, 46860), (61, 46920), (66, 46965), (68, 46977), (83, 47142), (86, 47160),

Gene: KingMidas_64 Start: 42554, Stop: 43162, Start Num: 28
Candidate Starts for KingMidas_64:
(Start: 28 @42554 has 21 MA's), (31, 42572), (33, 42581), (36, 42602), (49, 42752), (52, 42812), (61, 42866), (62, 42875), (77, 43001), (84, 43094), (87, 43112),

Gene: Leperchaun_57 Start: 40122, Stop: 40730, Start Num: 28
Candidate Starts for Leperchaun_57:
(Start: 28 @40122 has 21 MA's), (31, 40140), (33, 40149), (36, 40170), (49, 40320), (52, 40380), (61, 40434), (62, 40443), (77, 40569), (84, 40662), (87, 40680),

Gene: Linus_68 Start: 46494, Stop: 47348, Start Num: 5
Candidate Starts for Linus_68:
(Start: 5 @46494 has 17 MA's), (7, 46548), (18, 46671), (29, 46734), (34, 46758), (38, 46782), (46, 46890), (47, 46902), (49, 46923), (51, 46950), (52, 46977), (54, 46992), (59, 47004), (61, 47040), (71, 47127), (75, 47166), (76, 47175), (79, 47199), (80, 47220),

Gene: Lymara_64 Start: 44634, Stop: 45488, Start Num: 6
Candidate Starts for Lymara_64:
(Start: 6 @44634 has 2 MA's), (7, 44685), (9, 44691), (14, 44769), (18, 44808), (29, 44874), (34, 44898), (38, 44922), (46, 45030), (47, 45042), (49, 45063), (51, 45090), (52, 45117), (54, 45132), (59, 45144), (75, 45306), (79, 45339),

Gene: Mollymur_107 Start: 70157, Stop: 70744, Start Num: 26
Candidate Starts for Mollymur_107:
(21, 70139), (Start: 26 @70157 has 4 MA's), (Start: 28 @70160 has 21 MA's), (32, 70181), (36, 70208), (49, 70358), (50, 70382), (55, 70430), (61, 70472), (63, 70487), (67, 70523), (72, 70565), (73, 70568), (74, 70580), (81, 70637), (88, 70727),

Gene: Mordred_68 Start: 46409, Stop: 47266, Start Num: 5
Candidate Starts for Mordred_68:
(Start: 5 @46409 has 17 MA's), (7, 46463), (18, 46586), (29, 46652), (30, 46655), (38, 46700), (46, 46808), (47, 46820), (48, 46826), (49, 46841), (53, 46898), (61, 46958), (66, 47003), (68, 47015), (83,

47180), (86, 47198),

Gene: MoyaNatalis_69 Start: 46364, Stop: 47221, Start Num: 5
Candidate Starts for MoyaNatalis_69:
(3, 46316), (Start: 5 @46364 has 17 MA's), (7, 46418), (18, 46541), (29, 46607), (30, 46610), (38, 46655), (46, 46763), (47, 46775), (48, 46781), (49, 46796), (53, 46853), (61, 46913), (66, 46958), (68, 46970), (83, 47135), (86, 47153),

Gene: Myrna_63 Start: 23804, Stop: 24523, Start Num: 22
Candidate Starts for Myrna_63:
(Start: 22 @23804 has 2 MA's), (31, 23837), (36, 23867), (37, 23873), (43, 23951), (45, 23972), (49, 24020), (61, 24143), (68, 24200), (82, 24356),

Gene: Nimbo_58 Start: 40696, Stop: 41304, Start Num: 28
Candidate Starts for Nimbo_58:
(Start: 28 @40696 has 21 MA's), (31, 40714), (33, 40723), (36, 40744), (49, 40894), (52, 40954), (61, 41008), (62, 41017), (77, 41143), (84, 41236), (87, 41254),

Gene: Nostromo_45 Start: 34508, Stop: 35239, Start Num: 25
Candidate Starts for Nostromo_45:
(Start: 25 @34508 has 2 MA's), (42, 34631), (44, 34664), (46, 34682), (49, 34715), (64, 34868), (65, 34886), (93, 35183),

Gene: OldBen_62 Start: 42089, Stop: 42697, Start Num: 28
Candidate Starts for OldBen_62:
(Start: 28 @42089 has 21 MA's), (31, 42107), (33, 42116), (36, 42137), (49, 42287), (52, 42347), (61, 42401), (62, 42410), (77, 42536), (84, 42629), (87, 42647),

Gene: PHappiness_60 Start: 40668, Stop: 41276, Start Num: 28
Candidate Starts for PHappiness_60:
(Start: 28 @40668 has 21 MA's), (31, 40686), (33, 40695), (36, 40716), (49, 40866), (52, 40926), (61, 40980), (62, 40989), (77, 41115), (84, 41208), (87, 41226),

Gene: Phabba_69 Start: 24269, Stop: 24988, Start Num: 22
Candidate Starts for Phabba_69:
(Start: 22 @24269 has 2 MA's), (31, 24302), (36, 24332), (37, 24338), (40, 24368), (43, 24416), (45, 24437), (49, 24485), (63, 24623), (82, 24821), (87, 24866),

Gene: Polka14_63 Start: 41732, Stop: 42340, Start Num: 28
Candidate Starts for Polka14_63:
(Start: 28 @41732 has 21 MA's), (31, 41750), (33, 41759), (36, 41780), (49, 41930), (52, 41990), (61, 42044), (62, 42053), (77, 42179), (84, 42272), (87, 42290),

Gene: PrincessTrina_69 Start: 46396, Stop: 47253, Start Num: 5
Candidate Starts for PrincessTrina_69:
(Start: 5 @46396 has 17 MA's), (7, 46450), (18, 46573), (29, 46639), (30, 46642), (38, 46687), (46, 46795), (47, 46807), (48, 46813), (49, 46828), (53, 46885), (61, 46945), (66, 46990), (68, 47002), (83, 47167), (86, 47185),

Gene: RedBird_63 Start: 41535, Stop: 42143, Start Num: 28
Candidate Starts for RedBird_63:
(Start: 28 @41535 has 21 MA's), (31, 41553), (33, 41562), (36, 41583), (49, 41733), (52, 41793), (61, 41847), (62, 41856), (77, 41982), (84, 42075), (87, 42093),

Gene: RitaG_60 Start: 41013, Stop: 41621, Start Num: 28
Candidate Starts for RitaG_60:
(Start: 28 @41013 has 21 MA's), (31, 41031), (33, 41040), (36, 41061), (49, 41211), (52, 41271), (61, 41325), (62, 41334), (77, 41460), (84, 41553), (87, 41571),

Gene: RosiePosie_68 Start: 46183, Stop: 47037, Start Num: 5
Candidate Starts for RosiePosie_68:
(Start: 5 @46183 has 17 MA's), (7, 46237), (18, 46360), (29, 46423), (34, 46447), (38, 46471), (46, 46579), (47, 46591), (49, 46612), (51, 46639), (52, 46666), (54, 46681), (59, 46693), (61, 46729), (71, 46816), (75, 46855), (76, 46864), (79, 46888), (80, 46909), (86, 46969),

Gene: Sakai_79 Start: 46017, Stop: 46634, Start Num: 27
Candidate Starts for Sakai_79:
(1, 45630), (2, 45708), (15, 45933), (Start: 27 @46017 has 4 MA's), (36, 46071), (41, 46134), (46, 46188), (49, 46221), (89, 46626),

Gene: Sassafras_63 Start: 41853, Stop: 42461, Start Num: 28
Candidate Starts for Sassafras_63:
(Start: 28 @41853 has 21 MA's), (31, 41871), (33, 41880), (36, 41901), (49, 42051), (52, 42111), (61, 42165), (62, 42174), (77, 42300), (84, 42393), (87, 42411),

Gene: Scavito_69 Start: 46458, Stop: 47315, Start Num: 5
Candidate Starts for Scavito_69:
(Start: 5 @46458 has 17 MA's), (7, 46512), (18, 46635), (29, 46701), (30, 46704), (38, 46749), (46, 46857), (47, 46869), (48, 46875), (49, 46890), (53, 46947), (61, 47007), (66, 47052), (68, 47064), (83, 47229), (86, 47247),

Gene: ScoobyDoobyDoo_54 Start: 18880, Stop: 19575, Start Num: 20
Candidate Starts for ScoobyDoobyDoo_54:
(Start: 20 @18880 has 1 MA's), (31, 18919), (34, 18934), (36, 18949), (45, 19051), (49, 19099), (53, 19162), (56, 19177), (58, 19183), (61, 19216), (73, 19315), (84, 19438), (90, 19501),

Gene: Scottish_63 Start: 41809, Stop: 42417, Start Num: 28
Candidate Starts for Scottish_63:
(Start: 28 @41809 has 21 MA's), (31, 41827), (33, 41836), (36, 41857), (49, 42007), (52, 42067), (61, 42121), (62, 42130), (77, 42256), (84, 42349), (87, 42367),

Gene: SonDevVon_90 Start: 46962, Stop: 47579, Start Num: 27
Candidate Starts for SonDevVon_90:
(1, 46575), (2, 46653), (15, 46878), (Start: 27 @46962 has 4 MA's), (36, 47016), (41, 47079), (46, 47133), (49, 47166), (89, 47571),

Gene: SpeedDemon_1100 Start: 72257, Stop: 72862, Start Num: 26
Candidate Starts for SpeedDemon_1100:
(21, 72239), (Start: 26 @72257 has 4 MA's), (32, 72281), (36, 72308), (49, 72458), (50, 72482), (57, 72536), (63, 72587), (73, 72668), (87, 72797),

Gene: SpicyFrank_84 Start: 46548, Stop: 47213, Start Num: 27
Candidate Starts for SpicyFrank_84:
(12, 46425), (15, 46464), (Start: 27 @46548 has 4 MA's), (36, 46602), (41, 46665), (46, 46719), (49, 46752), (67, 46932), (69, 46950), (76, 47010),

Gene: Spoonbill_62 Start: 40973, Stop: 41581, Start Num: 28
Candidate Starts for Spoonbill_62:
(Start: 28 @40973 has 21 MA's), (31, 40991), (33, 41000), (36, 41021), (49, 41171), (52, 41231), (61, 41285), (62, 41294), (77, 41420), (84, 41513), (87, 41531),

Gene: Stap_62 Start: 41742, Stop: 42350, Start Num: 28
Candidate Starts for Stap_62:
(Start: 28 @41742 has 21 MA's), (31, 41760), (33, 41769), (36, 41790), (49, 41940), (52, 42000), (61, 42054), (62, 42063), (77, 42189), (84, 42282), (87, 42300),

Gene: Tophat_69 Start: 46329, Stop: 47186, Start Num: 5
Candidate Starts for Tophat_69:
(Start: 5 @46329 has 17 MA's), (7, 46383), (18, 46506), (29, 46572), (30, 46575), (38, 46620), (46, 46728), (47, 46740), (48, 46746), (49, 46761), (53, 46818), (61, 46878), (66, 46923), (68, 46935), (83, 47100), (86, 47118),