Pham 289200

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51: Grayson_94 + 1
52: Weasels2_93
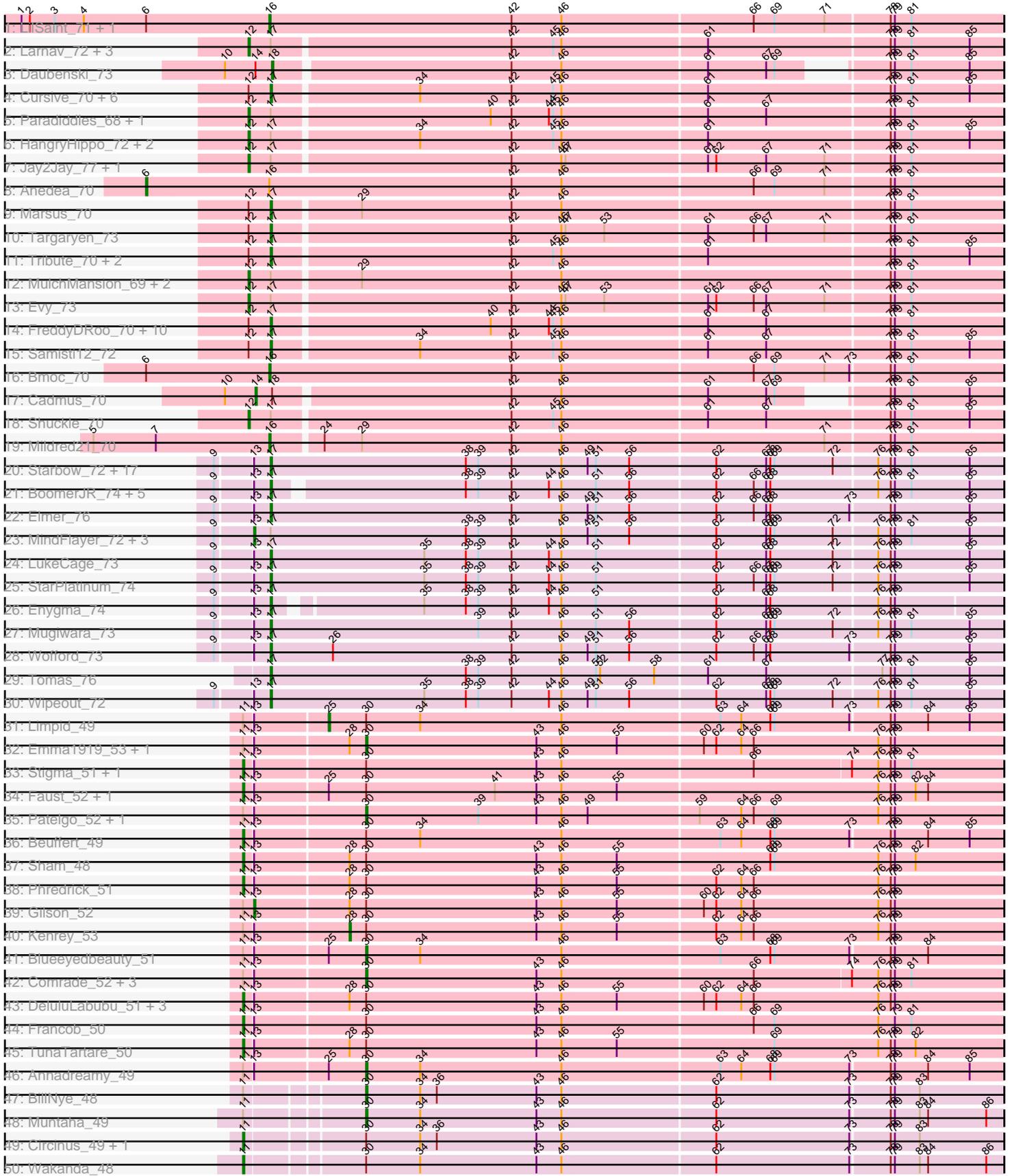53: NiceHouse_82
54: Trina_93
55: Nova53_64
56: Francesca_67
57: Dorin_68

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 289200 Report

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

Pham number 289200 has 122 members, 7 are drafts.

Phages represented in each track:
• Track 1 : LilSaint_71, Riptide_69
• Track 2 : Larnav_72, Peebs_71, Teutsch_72, Sushi23_72
• Track 3 : Daubenski_73
• Track 4 : Cursive_70, Coogler_72, Watermoore_72, PacManQ_71, Leo04_73, Cross_72, Lululemon_71
• Track 5 : Paradiddles_68, Braelyn_71
• Track 6 : HangryHippo_72, BlueOtter_72, EGole_73
• Track 7 : Jay2Jay_77, Warpy_76
• Track 8 : Anedea_70
• Track 9 : Marsus_70
• Track 10 : Targaryen_73
• Track 11 : Tribute_70, Pepperwood_72, Scheme_73
• Track 12 : MulchMansion_69, LilMartin_69, Angela_69
• Track 13 : Evy_73
• Track 14 : FreddyDRoo_70, NootNoot_68, Eliot67_70, Squillium_71, Persimmon_68, Navo_70, WhereRU_69, Bartholomune_70, Davielle_69, Liandry_71, PinkiePie_70
• Track 15 : Samisti12_72
• Track 16 : Bmoc_70
• Track 17 : Cadmus_70
• Track 18 : Shuckle_70
• Track 19 : Mildred21_70
• Track 20 : Starbow_72, Battuta_72, CeilingFan_73, Quaran19_74, Birchlyn_71, SaltySpitoon_74, Bordeaux_72, Gibbi_78, Spelly_74, JimJam_74, Karimac_73, Amabiko_74, KentuckyRacer_74, PumpkinSpice_73, AcciDwight_78, Rikishi_74, Jollison_73, Brizzy_73
• Track 21 : BoomerJR_74, AngryGiraffe_73, Stanimal_74, Sollertia_74, Genie2_74, Yaboi_74
• Track 22 : Elmer_76
• Track 23 : MindFlayer_72, TomSawyer_72, Spilled_75, IchabodCrane_71
• Track 24 : LukeCage_73
• Track 25 : StarPlatinum_74
• Track 26 : Enygma_74
• Track 27 : Mugiwara_73
• Track 28 : Wofford_73
• Track 29 : Tomas_76
• Track 30 : Wipeout_72

- Track 31 : Limpid_49
- Track 32 : Emma1919_53, Forrest_53
- Track 33 : Stigma_51, Karp_50
- Track 34 : Faust_52, SeresaTree_51
- Track 35 : Patelgo_52, Moab_52
- Track 36 : Beuffert_49
- Track 37 : Sham_48
- Track 38 : Phredrick_51
- Track 39 : Gilson_52
- Track 40 : Kenrey_53
- Track 41 : Blueeyedbeauty_51
- Track 42 : Comrade_52, Belfort_53, Westy_52, SparkleGoddess_52
- Track 43 : DeluluLabubu_51, MeganTheeKilla_50, Jada_51, Maupel_51
- Track 44 : Francob_50
- Track 45 : TunaTartare_50
- Track 46 : Annadreamy_49
- Track 47 : BillNye_48
- Track 48 : Muntaha_49
- Track 49 : Circinus_49, Chaewon_51
- Track 50 : Wakanda_48
- Track 51 : Grayson_94, Peregrin_91
- Track 52 : Weasels2_93
- Track 53 : NiceHouse_82
- Track 54 : Trina_93
- Track 55 : Nova53_64
- Track 56 : Francesca_67
- Track 57 : Dorin_68

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

The start number called the most often in the published annotations is 17, it was called in 52 of the 115 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- AcciDwight_78, Amabiko_74, AngryGiraffe_73, Bartholomune_70, Battuta_72, Birchlyn_71, BoomerJR_74, Bordeaux_72, Brizzy_73, CeilingFan_73, Coogler_72, Cross_72, Cursive_70, Davielle_69, Eliot67_70, Elmer_76, Enygma_74, FreddyDRoo_70, Genie2_74, Gibbi_78, JimJam_74, Jollison_73, Karimac_73, KentuckyRacer_74, Leo04_73, Liandry_71, LukeCage_73, Lululemon_71, Marsus_70, Mugiwara_73, Navo_70, NootNoot_68, PacManQ_71, Pepperwood_72, Persimmon_68, PinkiePie_70, PumpkinSpice_73, Quaran19_74, Rikishi_74, SaltySpitoon_74, Samisti12_72, Scheme_73, Sollertia_74, Spelly_74, Squillium_71, Stanimal_74, StarPlatinum_74, Starbow_72, Targaryen_73, Tomas_76, Tribute_70, Watermoore_72, WhereRU_69, Wipeout_72, Wofford_73, Yaboi_74,

Genes that have the "Most Annotated" start but do not call it:
- Angela_69, BlueOtter_72, Braelyn_71, EGole_73, Evy_73, HangryHippo_72, IchabodCrane_71, Jay2Jay_77, Larnav_72, LilMartin_69, MindFlayer_72, MulchMansion_69, Paradiddles_68, Peebs_71, Shuckle_70, Spilled_75, Sushi23_72, Teutsch_72, TomSawyer_72, Warpy_76,

Genes that do not have the "Most Annotated" start:
• Anedea_70, Annadreamy_49, Belfort_53, Beuffert_49, BillNye_48, Blueeyedbeauty_51, Bmoc_70, Cadmus_70, Chaewon_51, Circinus_49, Comrade_52, Daubenski_73, DeluluLabubu_51, Dorin_68, Emma1919_53, Faust_52, Forrest_53, Francesca_67, Francob_50, Gilson_52, Grayson_94, Jada_51, Karp_50, Kenrey_53, LilSaint_71, Limpid_49, Maupel_51, MeganTheeKilla_50, Mildred21_70, Moab_52, Muntaha_49, NiceHouse_82, Nova53_64, Patelgo_52, Peregrin_91, Phredrick_51, Riptide_69, SeresaTree_51, Sham_48, SparkleGoddess_52, Stigma_51, Trina_93, TunaTartare_50, Wakanda_48, Weasels2_93, Westy_52,

Summary by start number:

Start 6:
• Found in 4 of 122 (3.3%) of genes in pham
• Manual Annotations of this start: 1 of 115
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Anedea_70 (BE1),

Start 11:
• Found in 31 of 122 (25.4%) of genes in pham
• Manual Annotations of this start: 13 of 115
• Called 51.6% of time when present
• Phage (with cluster) where this start called: Beuffert_49 (BK1), Chaewon_51 (BK2), Circinus_49 (BK2), DeluluLabubu_51 (BK1), Faust_52 (BK1), Francob_50 (BK1), Jada_51 (BK1), Karp_50 (BK1), Maupel_51 (BK1), MeganTheeKilla_50 (BK1), Phredrick_51 (BK1), SeresaTree_51 (BK1), Sham_48 (BK1), Stigma_51 (BK1), TunaTartare_50 (BK1), Wakanda_48 (BK2),

Start 12:
• Found in 40 of 122 (32.8%) of genes in pham
• Manual Annotations of this start: 16 of 115
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Angela_69 (BE1), BlueOtter_72 (BE1), Braelyn_71 (BE1), EGole_73 (BE1), Evy_73 (BE1), HangryHippo_72 (BE1), Jay2Jay_77 (BE1), Larnav_72 (BE1), LilMartin_69 (BE1), MulchMansion_69 (BE1), Paradiddles_68 (BE1), Peebs_71 (BE1), Shuckle_70 (BE1), Sushi23_72 (BE1), Teutsch_72 (BE1), Warpy_76 (BE1),

Start 13:
• Found in 61 of 122 (50.0%) of genes in pham
• Manual Annotations of this start: 5 of 115
• Called 8.2% of time when present
• Phage (with cluster) where this start called: Gilson_52 (BK1), IchabodCrane_71 (BE2), MindFlayer_72 (BE2), Spilled_75 (BE2), TomSawyer_72 (BE2),

Start 14:
• Found in 2 of 122 (1.6%) of genes in pham
• Manual Annotations of this start: 1 of 115
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Cadmus_70 (BE1),

Start 15:
- Found in 2 of 122 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 115
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Dorin_68 (CG),

Start 16:
- Found in 5 of 122 (4.1%) of genes in pham
- Manual Annotations of this start: 4 of 115
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Bmoc_70 (BE1), LilSaint_71 (BE1), Mildred21_70 (BE1), Riptide_69 (BE1),

Start 17:
- Found in 76 of 122 (62.3%) of genes in pham
- Manual Annotations of this start: 52 of 115
- Called 73.7% of time when present
- Phage (with cluster) where this start called: AcciDwight_78 (BE2), Amabiko_74 (BE2), AngryGiraffe_73 (BE2), Bartholomune_70 (BE1), Battuta_72 (BE2), Birchlyn_71 (BE2), BoomerJR_74 (BE2), Bordeaux_72 (BE2), Brizzy_73 (BE2), CeilingFan_73 (BE2), Coogler_72 (BE1), Cross_72 (BE1), Cursive_70 (BE1), Davielle_69 (BE1), Eliot67_70 (BE1), Elmer_76 (BE2), Enygma_74 (BE2), FreddyDRoo_70 (BE1), Genie2_74 (BE2), Gibbi_78 (BE2), JimJam_74 (BE2), Jollison_73 (BE2), Karimac_73 (BE2), KentuckyRacer_74 (BE2), Leo04_73 (BE1), Liandry_71 (BE1), LukeCage_73 (BE2), Lululemon_71 (BE1), Marsus_70 (BE1), Mugiwara_73 (BE2), Navo_70 (BE1), NootNoot_68 (BE1), PacManQ_71 (BE1), Pepperwood_72 (BE1), Persimmon_68 (BE1), PinkiePie_70 (BE1), PumpkinSpice_73 (BE2), Quaran19_74 (BE2), Rikishi_74 (BE2), SaltySpitoon_74 (BE2), Samisti12_72 (BE1), Scheme_73 (BE1), Sollertia_74 (BE2), Spelly_74 (BE2), Squillium_71 (BE1), Stanimal_74 (BE2), StarPlatinum_74 (BE2), Starbow_72 (BE2), Targaryen_73 (BE1), Tomas_76 (BE2), Tribute_70 (BE1), Watermoore_72 (BE1), WhereRU_69 (BE1), Wipeout_72 (BE2), Wofford_73 (BE2), Yaboi_74 (BE2),

Start 18:
- Found in 2 of 122 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 115
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Daubenski_73 (BE1),

Start 19:
- Found in 2 of 122 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trina_93 (CE), Weasels2_93 (CB),

Start 20:
- Found in 2 of 122 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson_94 (CB), Peregrin_91 (CB),

Start 22:
- Found in 1 of 122 (0.8%) of genes in pham

- Manual Annotations of this start: 1 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NiceHouse_82 (CE),

Start 25:
- Found in 5 of 122 (4.1%) of genes in pham
- Manual Annotations of this start: 1 of 115
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Limpid_49 (BK1),

Start 27:
- Found in 3 of 122 (2.5%) of genes in pham
- Manual Annotations of this start: 2 of 115
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Francesca_67 (CG), Nova53_64 (CG),

Start 28:
- Found in 12 of 122 (9.8%) of genes in pham
- Manual Annotations of this start: 1 of 115
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Kenrey_53 (BK1),

Start 30:
- Found in 34 of 122 (27.9%) of genes in pham
- Manual Annotations of this start: 12 of 115
- Called 35.3% of time when present
- Phage (with cluster) where this start called: Annadreamy_49 (BK1), Belfort_53 (BK1), BillNye_48 (BK2), Blueeyedbeauty_51 (BK1), Comrade_52 (BK1), Emma1919_53 (BK1), Forrest_53 (BK1), Moab_52 (BK1), Muntaha_49 (BK2), Patelgo_52 (BK1), SparkleGoddess_52 (BK1), Westy_52 (BK1),

Summary by clusters:

There are 7 clusters represented in this pham: CB, CG, CE, BK1, BK2, BE2, BE1,

Info for manual annotations of cluster BE1:
- Start number 6 was manually annotated 1 time for cluster BE1.
- Start number 12 was manually annotated 16 times for cluster BE1.
- Start number 14 was manually annotated 1 time for cluster BE1.
- Start number 16 was manually annotated 4 times for cluster BE1.
- Start number 17 was manually annotated 22 times for cluster BE1.
- Start number 18 was manually annotated 1 time for cluster BE1.

Info for manual annotations of cluster BE2:
- Start number 13 was manually annotated 4 times for cluster BE2.
- Start number 17 was manually annotated 30 times for cluster BE2.

Info for manual annotations of cluster BK1:
- Start number 11 was manually annotated 11 times for cluster BK1.
- Start number 13 was manually annotated 1 time for cluster BK1.
- Start number 25 was manually annotated 1 time for cluster BK1.
- Start number 28 was manually annotated 1 time for cluster BK1.
- Start number 30 was manually annotated 10 times for cluster BK1.

Info for manual annotations of cluster BK2:
•Start number 11 was manually annotated 2 times for cluster BK2.
•Start number 30 was manually annotated 2 times for cluster BK2.

Info for manual annotations of cluster CB:
•Start number 19 was manually annotated 1 time for cluster CB.
•Start number 20 was manually annotated 2 times for cluster CB.

Info for manual annotations of cluster CE:
•Start number 19 was manually annotated 1 time for cluster CE.
•Start number 22 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster CG:
•Start number 15 was manually annotated 1 time for cluster CG.
•Start number 27 was manually annotated 2 times for cluster CG.

Gene Information:

Gene: AcciDwight_78 Start: 53577, Stop: 54098, Start Num: 17
Candidate Starts for AcciDwight_78:
(9, 53541), (Start: 13 @53565 has 5 MA's), (Start: 17 @53577 has 52 MA's), (38, 53718), (39, 53727), (42, 53751), (46, 53787), (49, 53805), (51, 53811), (56, 53835), (62, 53895), (67, 53931), (68, 53934), (69, 53937), (72, 53979), (76, 54009), (78, 54018), (79, 54021), (81, 54033), (85, 54075),

Gene: Amabiko_74 Start: 53622, Stop: 54143, Start Num: 17
Candidate Starts for Amabiko_74:
(9, 53586), (Start: 13 @53610 has 5 MA's), (Start: 17 @53622 has 52 MA's), (38, 53763), (39, 53772), (42, 53796), (46, 53832), (49, 53850), (51, 53856), (56, 53880), (62, 53940), (67, 53976), (68, 53979), (69, 53982), (72, 54024), (76, 54054), (78, 54063), (79, 54066), (81, 54078), (85, 54120),

Gene: Anedea_70 Start: 53108, Stop: 53716, Start Num: 6
Candidate Starts for Anedea_70:
(Start: 6 @53108 has 1 MA's), (Start: 16 @53195 has 4 MA's), (42, 53369), (46, 53405), (66, 53540), (69, 53555), (71, 53591), (78, 53636), (79, 53639), (81, 53651),

Gene: Angela_69 Start: 52641, Stop: 53171, Start Num: 12
Candidate Starts for Angela_69:
(Start: 12 @52641 has 16 MA's), (Start: 17 @52656 has 52 MA's), (29, 52716), (42, 52824), (46, 52860), (78, 53091), (79, 53094), (81, 53106),

Gene: AngryGiraffe_73 Start: 53585, Stop: 54094, Start Num: 17
Candidate Starts for AngryGiraffe_73:
(9, 53549), (Start: 13 @53573 has 5 MA's), (Start: 17 @53585 has 52 MA's), (38, 53714), (39, 53723), (42, 53747), (44, 53774), (46, 53783), (51, 53807), (56, 53831), (62, 53891), (66, 53918), (67, 53927), (68, 53930), (76, 54005), (78, 54014), (79, 54017), (81, 54029), (85, 54071),

Gene: Annadreamy_49 Start: 42625, Stop: 43077, Start Num: 30
Candidate Starts for Annadreamy_49:
(Start: 11 @42541 has 13 MA's), (Start: 13 @42547 has 5 MA's), (Start: 25 @42598 has 1 MA's), (Start: 30 @42625 has 12 MA's), (34, 42664), (46, 42766), (63, 42877), (64, 42892), (68, 42913), (69,

42916), (73, 42970), (78, 42997), (79, 43000), (84, 43024), (85, 43054),

Gene: Bartholomune_70 Start: 53022, Stop: 53537, Start Num: 17
Candidate Starts for Bartholomune_70:
(Start: 12 @53007 has 16 MA's), (Start: 17 @53022 has 52 MA's), (40, 53175), (42, 53190), (44, 53217), (45, 53220), (46, 53226), (61, 53328), (67, 53370), (78, 53457), (79, 53460), (81, 53472),

Gene: Battuta_72 Start: 53596, Stop: 54117, Start Num: 17
Candidate Starts for Battuta_72:
(9, 53560), (Start: 13 @53584 has 5 MA's), (Start: 17 @53596 has 52 MA's), (38, 53737), (39, 53746), (42, 53770), (46, 53806), (49, 53824), (51, 53830), (56, 53854), (62, 53914), (67, 53950), (68, 53953), (69, 53956), (72, 53998), (76, 54028), (78, 54037), (79, 54040), (81, 54052), (85, 54094),

Gene: Belfort_53 Start: 45146, Stop: 45598, Start Num: 30
Candidate Starts for Belfort_53:
(Start: 11 @45062 has 13 MA's), (Start: 13 @45068 has 5 MA's), (Start: 30 @45146 has 12 MA's), (43, 45269), (46, 45287), (66, 45422), (74, 45491), (76, 45509), (78, 45518), (79, 45521), (81, 45533),

Gene: Beuffert_49 Start: 43682, Stop: 44218, Start Num: 11
Candidate Starts for Beuffert_49:
(Start: 11 @43682 has 13 MA's), (Start: 13 @43688 has 5 MA's), (Start: 30 @43766 has 12 MA's), (34, 43805), (46, 43907), (63, 44018), (64, 44033), (68, 44054), (69, 44057), (73, 44111), (78, 44138), (79, 44141), (84, 44165), (85, 44195),

Gene: BillNye_48 Start: 46547, Stop: 46999, Start Num: 30
Candidate Starts for BillNye_48:
(Start: 11 @46469 has 13 MA's), (Start: 30 @46547 has 12 MA's), (34, 46586), (36, 46598), (43, 46670), (46, 46688), (62, 46796), (73, 46892), (78, 46919), (79, 46922), (83, 46940),

Gene: Birchlyn_71 Start: 51479, Stop: 52000, Start Num: 17
Candidate Starts for Birchlyn_71:
(9, 51443), (Start: 13 @51467 has 5 MA's), (Start: 17 @51479 has 52 MA's), (38, 51620), (39, 51629), (42, 51653), (46, 51689), (49, 51707), (51, 51713), (56, 51737), (62, 51797), (67, 51833), (68, 51836), (69, 51839), (72, 51881), (76, 51911), (78, 51920), (79, 51923), (81, 51935), (85, 51977),

Gene: BlueOtter_72 Start: 54381, Stop: 54911, Start Num: 12
Candidate Starts for BlueOtter_72:
(Start: 12 @54381 has 16 MA's), (Start: 17 @54396 has 52 MA's), (34, 54498), (42, 54564), (45, 54594), (46, 54600), (61, 54702), (78, 54831), (79, 54834), (81, 54846), (85, 54888),

Gene: Blueeyedbeauty_51 Start: 43137, Stop: 43589, Start Num: 30
Candidate Starts for Blueeyedbeauty_51:
(Start: 11 @43053 has 13 MA's), (Start: 13 @43059 has 5 MA's), (Start: 25 @43110 has 1 MA's), (Start: 30 @43137 has 12 MA's), (34, 43176), (46, 43278), (63, 43389), (68, 43425), (69, 43428), (73, 43482), (78, 43509), (79, 43512), (84, 43536),

Gene: Bmoc_70 Start: 52999, Stop: 53520, Start Num: 16
Candidate Starts for Bmoc_70:
(Start: 6 @52912 has 1 MA's), (Start: 16 @52999 has 4 MA's), (42, 53173), (46, 53209), (66, 53344), (69, 53359), (71, 53395), (73, 53413), (78, 53440), (79, 53443), (81, 53455),

Gene: BoomerJR_74 Start: 53474, Stop: 53983, Start Num: 17
Candidate Starts for BoomerJR_74:

(9, 53438), (Start: 13 @53462 has 5 MA's), (Start: 17 @53474 has 52 MA's), (38, 53603), (39, 53612), (42, 53636), (44, 53663), (46, 53672), (51, 53696), (56, 53720), (62, 53780), (66, 53807), (67, 53816), (68, 53819), (76, 53894), (78, 53903), (79, 53906), (81, 53918), (85, 53960),

Gene: Bordeaux_72 Start: 53751, Stop: 54272, Start Num: 17
Candidate Starts for Bordeaux_72:
(9, 53715), (Start: 13 @53739 has 5 MA's), (Start: 17 @53751 has 52 MA's), (38, 53892), (39, 53901), (42, 53925), (46, 53961), (49, 53979), (51, 53985), (56, 54009), (62, 54069), (67, 54105), (68, 54108), (69, 54111), (72, 54153), (76, 54183), (78, 54192), (79, 54195), (81, 54207), (85, 54249),

Gene: Braelyn_71 Start: 53774, Stop: 54304, Start Num: 12
Candidate Starts for Braelyn_71:
(Start: 12 @53774 has 16 MA's), (Start: 17 @53789 has 52 MA's), (40, 53942), (42, 53957), (44, 53984), (45, 53987), (46, 53993), (61, 54095), (67, 54137), (78, 54224), (79, 54227), (81, 54239),

Gene: Brizzy_73 Start: 53270, Stop: 53791, Start Num: 17
Candidate Starts for Brizzy_73:
(9, 53234), (Start: 13 @53258 has 5 MA's), (Start: 17 @53270 has 52 MA's), (38, 53411), (39, 53420), (42, 53444), (46, 53480), (49, 53498), (51, 53504), (56, 53528), (62, 53588), (67, 53624), (68, 53627), (69, 53630), (72, 53672), (76, 53702), (78, 53711), (79, 53714), (81, 53726), (85, 53768),

Gene: Cadmus_70 Start: 53395, Stop: 53886, Start Num: 14
Candidate Starts for Cadmus_70:
(10, 53374), (Start: 14 @53395 has 1 MA's), (Start: 18 @53407 has 1 MA's), (42, 53572), (46, 53608), (61, 53710), (67, 53752), (69, 53758), (78, 53806), (79, 53809), (81, 53821), (85, 53863),

Gene: CeilingFan_73 Start: 53511, Stop: 54032, Start Num: 17
Candidate Starts for CeilingFan_73:
(9, 53475), (Start: 13 @53499 has 5 MA's), (Start: 17 @53511 has 52 MA's), (38, 53652), (39, 53661), (42, 53685), (46, 53721), (49, 53739), (51, 53745), (56, 53769), (62, 53829), (67, 53865), (68, 53868), (69, 53871), (72, 53913), (76, 53943), (78, 53952), (79, 53955), (81, 53967), (85, 54009),

Gene: Chaewon_51 Start: 46609, Stop: 47139, Start Num: 11
Candidate Starts for Chaewon_51:
(Start: 11 @46609 has 13 MA's), (Start: 30 @46687 has 12 MA's), (34, 46726), (36, 46738), (43, 46810), (46, 46828), (62, 46936), (73, 47032), (78, 47059), (79, 47062), (83, 47080),

Gene: Circinus_49 Start: 46608, Stop: 47138, Start Num: 11
Candidate Starts for Circinus_49:
(Start: 11 @46608 has 13 MA's), (Start: 30 @46686 has 12 MA's), (34, 46725), (36, 46737), (43, 46809), (46, 46827), (62, 46935), (73, 47031), (78, 47058), (79, 47061), (83, 47079),

Gene: Comrade_52 Start: 44762, Stop: 45214, Start Num: 30
Candidate Starts for Comrade_52:
(Start: 11 @44678 has 13 MA's), (Start: 13 @44684 has 5 MA's), (Start: 30 @44762 has 12 MA's), (43, 44885), (46, 44903), (66, 45038), (74, 45107), (76, 45125), (78, 45134), (79, 45137), (81, 45149),

Gene: Coogler_72 Start: 54422, Stop: 54937, Start Num: 17
Candidate Starts for Coogler_72:
(Start: 12 @54407 has 16 MA's), (Start: 17 @54422 has 52 MA's), (34, 54524), (42, 54590), (45, 54620), (46, 54626), (61, 54728), (78, 54857), (79, 54860), (81, 54872), (85, 54914),

Gene: Cross_72 Start: 54397, Stop: 54912, Start Num: 17

Candidate Starts for Cross_72:
(Start: 12 @54382 has 16 MA's), (Start: 17 @54397 has 52 MA's), (34, 54499), (42, 54565), (45, 54595), (46, 54601), (61, 54703), (78, 54832), (79, 54835), (81, 54847), (85, 54889),

Gene: Cursive_70 Start: 53922, Stop: 54437, Start Num: 17
Candidate Starts for Cursive_70:
(Start: 12 @53907 has 16 MA's), (Start: 17 @53922 has 52 MA's), (34, 54024), (42, 54090), (45, 54120), (46, 54126), (61, 54228), (78, 54357), (79, 54360), (81, 54372), (85, 54414),

Gene: Daubenski_73 Start: 54171, Stop: 54650, Start Num: 18
Candidate Starts for Daubenski_73:
(10, 54138), (Start: 14 @54159 has 1 MA's), (Start: 18 @54171 has 1 MA's), (42, 54336), (46, 54372), (61, 54474), (67, 54516), (69, 54522), (78, 54570), (79, 54573), (81, 54585), (85, 54627),

Gene: Davielle_69 Start: 53209, Stop: 53724, Start Num: 17
Candidate Starts for Davielle_69:
(Start: 12 @53194 has 16 MA's), (Start: 17 @53209 has 52 MA's), (40, 53362), (42, 53377), (44, 53404), (45, 53407), (46, 53413), (61, 53515), (67, 53557), (78, 53644), (79, 53647), (81, 53659),

Gene: DeluluLabubu_51 Start: 42792, Stop: 43331, Start Num: 11
Candidate Starts for DeluluLabubu_51:
(Start: 11 @42792 has 13 MA's), (Start: 13 @42798 has 5 MA's), (Start: 28 @42864 has 1 MA's), (Start: 30 @42876 has 12 MA's), (43, 42999), (46, 43017), (55, 43056), (60, 43116), (62, 43125), (64, 43143), (66, 43152), (76, 43242), (78, 43251), (79, 43254),

Gene: Dorin_68 Start: 55174, Stop: 55680, Start Num: 15
Candidate Starts for Dorin_68:
(Start: 15 @55174 has 1 MA's), (21, 55195), (24, 55207), (Start: 27 @55216 has 2 MA's), (34, 55276), (35, 55279), (37, 55306), (64, 55507), (75, 55579), (85, 55660),

Gene: EGole_73 Start: 55328, Stop: 55858, Start Num: 12
Candidate Starts for EGole_73:
(Start: 12 @55328 has 16 MA's), (Start: 17 @55343 has 52 MA's), (34, 55445), (42, 55511), (45, 55541), (46, 55547), (61, 55649), (78, 55778), (79, 55781), (81, 55793), (85, 55835),

Gene: Eliot67_70 Start: 53064, Stop: 53579, Start Num: 17
Candidate Starts for Eliot67_70:
(Start: 12 @53049 has 16 MA's), (Start: 17 @53064 has 52 MA's), (40, 53217), (42, 53232), (44, 53259), (45, 53262), (46, 53268), (61, 53370), (67, 53412), (78, 53499), (79, 53502), (81, 53514),

Gene: Elmer_76 Start: 54689, Stop: 55210, Start Num: 17
Candidate Starts for Elmer_76:
(9, 54653), (Start: 13 @54677 has 5 MA's), (Start: 17 @54689 has 52 MA's), (42, 54863), (46, 54899), (49, 54917), (51, 54923), (56, 54947), (62, 55007), (66, 55034), (67, 55043), (68, 55046), (73, 55103), (78, 55130), (79, 55133), (85, 55187),

Gene: Emma1919_53 Start: 43559, Stop: 44014, Start Num: 30
Candidate Starts for Emma1919_53:
(Start: 11 @43475 has 13 MA's), (Start: 13 @43481 has 5 MA's), (Start: 28 @43547 has 1 MA's), (Start: 30 @43559 has 12 MA's), (43, 43682), (46, 43700), (55, 43739), (60, 43799), (62, 43808), (64, 43826), (66, 43835), (76, 43925), (78, 43934), (79, 43937),

Gene: Enygma_74 Start: 55414, Stop: 55917, Start Num: 17

Candidate Starts for Enygma_74:
(9, 55378), (Start: 13 @55402 has 5 MA's), (Start: 17 @55414 has 52 MA's), (35, 55510), (38, 55540), (39, 55549), (42, 55573), (44, 55600), (46, 55609), (51, 55633), (62, 55717), (67, 55753), (68, 55756), (76, 55831), (78, 55840), (79, 55843),

Gene: Evy_73 Start: 54276, Stop: 54806, Start Num: 12
Candidate Starts for Evy_73:
(Start: 12 @54276 has 16 MA's), (Start: 17 @54291 has 52 MA's), (42, 54459), (46, 54495), (47, 54498), (53, 54525), (61, 54597), (62, 54603), (66, 54630), (67, 54639), (71, 54681), (78, 54726), (79, 54729), (81, 54741),

Gene: Faust_52 Start: 44606, Stop: 45145, Start Num: 11
Candidate Starts for Faust_52:
(Start: 11 @44606 has 13 MA's), (Start: 13 @44612 has 5 MA's), (Start: 25 @44663 has 1 MA's), (Start: 30 @44690 has 12 MA's), (41, 44783), (43, 44813), (46, 44831), (55, 44870), (76, 45056), (78, 45065), (79, 45068), (82, 45083), (84, 45092),

Gene: Forrest_53 Start: 44256, Stop: 44711, Start Num: 30
Candidate Starts for Forrest_53:
(Start: 11 @44172 has 13 MA's), (Start: 13 @44178 has 5 MA's), (Start: 28 @44244 has 1 MA's), (Start: 30 @44256 has 12 MA's), (43, 44379), (46, 44397), (55, 44436), (60, 44496), (62, 44505), (64, 44523), (66, 44532), (76, 44622), (78, 44631), (79, 44634),

Gene: Francesca_67 Start: 55399, Stop: 55863, Start Num: 27
Candidate Starts for Francesca_67:
(Start: 15 @55357 has 1 MA's), (21, 55378), (24, 55390), (Start: 27 @55399 has 2 MA's), (34, 55459), (35, 55462), (37, 55489), (64, 55690), (75, 55762), (85, 55843),

Gene: Francob_50 Start: 43536, Stop: 44075, Start Num: 11
Candidate Starts for Francob_50:
(Start: 11 @43536 has 13 MA's), (Start: 13 @43542 has 5 MA's), (Start: 30 @43620 has 12 MA's), (43, 43743), (46, 43761), (66, 43896), (69, 43911), (76, 43986), (79, 43998), (81, 44010),

Gene: FreddyDRoo_70 Start: 53064, Stop: 53579, Start Num: 17
Candidate Starts for FreddyDRoo_70:
(Start: 12 @53049 has 16 MA's), (Start: 17 @53064 has 52 MA's), (40, 53217), (42, 53232), (44, 53259), (45, 53262), (46, 53268), (61, 53370), (67, 53412), (78, 53499), (79, 53502), (81, 53514),

Gene: Genie2_74 Start: 53588, Stop: 54097, Start Num: 17
Candidate Starts for Genie2_74:
(9, 53552), (Start: 13 @53576 has 5 MA's), (Start: 17 @53588 has 52 MA's), (38, 53717), (39, 53726), (42, 53750), (44, 53777), (46, 53786), (51, 53810), (56, 53834), (62, 53894), (66, 53921), (67, 53930), (68, 53933), (76, 54008), (78, 54017), (79, 54020), (81, 54032), (85, 54074),

Gene: Gibbi_78 Start: 53734, Stop: 54255, Start Num: 17
Candidate Starts for Gibbi_78:
(9, 53698), (Start: 13 @53722 has 5 MA's), (Start: 17 @53734 has 52 MA's), (38, 53875), (39, 53884), (42, 53908), (46, 53944), (49, 53962), (51, 53968), (56, 53992), (62, 54052), (67, 54088), (68, 54091), (69, 54094), (72, 54136), (76, 54166), (78, 54175), (79, 54178), (81, 54190), (85, 54232),

Gene: Gilson_52 Start: 43434, Stop: 43967, Start Num: 13
Candidate Starts for Gilson_52:

(Start: 11 @43428 has 13 MA's), (Start: 13 @43434 has 5 MA's), (Start: 28 @43500 has 1 MA's), (Start: 30 @43512 has 12 MA's), (43, 43635), (46, 43653), (55, 43692), (60, 43752), (62, 43761), (64, 43779), (66, 43788), (76, 43878), (78, 43887), (79, 43890),

Gene: Grayson_94 Start: 57408, Stop: 57893, Start Num: 20
Candidate Starts for Grayson_94:
(Start: 20 @57408 has 2 MA's), (Start: 30 @57453 has 12 MA's), (54, 57627), (64, 57717), (70, 57750), (75, 57789), (79, 57819),

Gene: HangryHippo_72 Start: 54381, Stop: 54911, Start Num: 12
Candidate Starts for HangryHippo_72:
(Start: 12 @54381 has 16 MA's), (Start: 17 @54396 has 52 MA's), (34, 54498), (42, 54564), (45, 54594), (46, 54600), (61, 54702), (78, 54831), (79, 54834), (81, 54846), (85, 54888),

Gene: IchabodCrane_71 Start: 53311, Stop: 53844, Start Num: 13
Candidate Starts for IchabodCrane_71:
(9, 53287), (Start: 13 @53311 has 5 MA's), (Start: 17 @53323 has 52 MA's), (38, 53464), (39, 53473), (42, 53497), (46, 53533), (49, 53551), (51, 53557), (56, 53581), (62, 53641), (67, 53677), (68, 53680), (69, 53683), (72, 53725), (76, 53755), (78, 53764), (79, 53767), (81, 53779), (85, 53821),

Gene: Jada_51 Start: 43354, Stop: 43893, Start Num: 11
Candidate Starts for Jada_51:
(Start: 11 @43354 has 13 MA's), (Start: 13 @43360 has 5 MA's), (Start: 28 @43426 has 1 MA's), (Start: 30 @43438 has 12 MA's), (43, 43561), (46, 43579), (55, 43618), (60, 43678), (62, 43687), (64, 43705), (66, 43714), (76, 43804), (78, 43813), (79, 43816),

Gene: Jay2Jay_77 Start: 55129, Stop: 55659, Start Num: 12
Candidate Starts for Jay2Jay_77:
(Start: 12 @55129 has 16 MA's), (Start: 17 @55144 has 52 MA's), (42, 55312), (46, 55348), (47, 55351), (61, 55450), (62, 55456), (67, 55492), (71, 55534), (78, 55579), (79, 55582), (81, 55594),

Gene: JimJam_74 Start: 53697, Stop: 54218, Start Num: 17
Candidate Starts for JimJam_74:
(9, 53661), (Start: 13 @53685 has 5 MA's), (Start: 17 @53697 has 52 MA's), (38, 53838), (39, 53847), (42, 53871), (46, 53907), (49, 53925), (51, 53931), (56, 53955), (62, 54015), (67, 54051), (68, 54054), (69, 54057), (72, 54099), (76, 54129), (78, 54138), (79, 54141), (81, 54153), (85, 54195),

Gene: Jollison_73 Start: 53579, Stop: 54100, Start Num: 17
Candidate Starts for Jollison_73:
(9, 53543), (Start: 13 @53567 has 5 MA's), (Start: 17 @53579 has 52 MA's), (38, 53720), (39, 53729), (42, 53753), (46, 53789), (49, 53807), (51, 53813), (56, 53837), (62, 53897), (67, 53933), (68, 53936), (69, 53939), (72, 53981), (76, 54011), (78, 54020), (79, 54023), (81, 54035), (85, 54077),

Gene: Karimac_73 Start: 53728, Stop: 54249, Start Num: 17
Candidate Starts for Karimac_73:
(9, 53692), (Start: 13 @53716 has 5 MA's), (Start: 17 @53728 has 52 MA's), (38, 53869), (39, 53878), (42, 53902), (46, 53938), (49, 53956), (51, 53962), (56, 53986), (62, 54046), (67, 54082), (68, 54085), (69, 54088), (72, 54130), (76, 54160), (78, 54169), (79, 54172), (81, 54184), (85, 54226),

Gene: Karp_50 Start: 44277, Stop: 44813, Start Num: 11
Candidate Starts for Karp_50:
(Start: 11 @44277 has 13 MA's), (Start: 13 @44283 has 5 MA's), (Start: 30 @44361 has 12 MA's), (43, 44484), (46, 44502), (66, 44637), (74, 44706), (76, 44724), (78, 44733), (79, 44736), (81, 44748),

Gene: Kenrey_53 Start: 43695, Stop: 44162, Start Num: 28
Candidate Starts for Kenrey_53:
(Start: 11 @43623 has 13 MA's), (Start: 13 @43629 has 5 MA's), (Start: 28 @43695 has 1 MA's), (Start: 30 @43707 has 12 MA's), (43, 43830), (46, 43848), (55, 43887), (62, 43956), (64, 43974), (66, 43983), (76, 44073), (78, 44082), (79, 44085),

Gene: KentuckyRacer_74 Start: 53512, Stop: 54033, Start Num: 17
Candidate Starts for KentuckyRacer_74:
(9, 53476), (Start: 13 @53500 has 5 MA's), (Start: 17 @53512 has 52 MA's), (38, 53653), (39, 53662), (42, 53686), (46, 53722), (49, 53740), (51, 53746), (56, 53770), (62, 53830), (67, 53866), (68, 53869), (69, 53872), (72, 53914), (76, 53944), (78, 53953), (79, 53956), (81, 53968), (85, 54010),

Gene: Larnav_72 Start: 54366, Stop: 54896, Start Num: 12
Candidate Starts for Larnav_72:
(Start: 12 @54366 has 16 MA's), (Start: 17 @54381 has 52 MA's), (42, 54549), (45, 54579), (46, 54585), (61, 54687), (78, 54816), (79, 54819), (81, 54831), (85, 54873),

Gene: Leo04_73 Start: 54896, Stop: 55411, Start Num: 17
Candidate Starts for Leo04_73:
(Start: 12 @54881 has 16 MA's), (Start: 17 @54896 has 52 MA's), (34, 54998), (42, 55064), (45, 55094), (46, 55100), (61, 55202), (78, 55331), (79, 55334), (81, 55346), (85, 55388),

Gene: Liandry_71 Start: 53771, Stop: 54286, Start Num: 17
Candidate Starts for Liandry_71:
(Start: 12 @53756 has 16 MA's), (Start: 17 @53771 has 52 MA's), (40, 53924), (42, 53939), (44, 53966), (45, 53969), (46, 53975), (61, 54077), (67, 54119), (78, 54206), (79, 54209), (81, 54221),

Gene: LilMartin_69 Start: 52589, Stop: 53119, Start Num: 12
Candidate Starts for LilMartin_69:
(Start: 12 @52589 has 16 MA's), (Start: 17 @52604 has 52 MA's), (29, 52664), (42, 52772), (46, 52808), (78, 53039), (79, 53042), (81, 53054),

Gene: LilSaint_71 Start: 52867, Stop: 53388, Start Num: 16
Candidate Starts for LilSaint_71:
(1, 52690), (2, 52696), (3, 52714), (4, 52735), (Start: 6 @52780 has 1 MA's), (Start: 16 @52867 has 4 MA's), (42, 53041), (46, 53077), (66, 53212), (69, 53227), (71, 53263), (78, 53308), (79, 53311), (81, 53323),

Gene: Limpid_49 Start: 42597, Stop: 43076, Start Num: 25
Candidate Starts for Limpid_49:
(Start: 11 @42540 has 13 MA's), (Start: 13 @42546 has 5 MA's), (Start: 25 @42597 has 1 MA's), (Start: 30 @42624 has 12 MA's), (34, 42663), (46, 42765), (63, 42876), (64, 42891), (68, 42912), (69, 42915), (73, 42969), (78, 42996), (79, 42999), (84, 43023), (85, 43053),

Gene: LukeCage_73 Start: 53482, Stop: 54003, Start Num: 17
Candidate Starts for LukeCage_73:
(9, 53446), (Start: 13 @53470 has 5 MA's), (Start: 17 @53482 has 52 MA's), (35, 53593), (38, 53623), (39, 53632), (42, 53656), (44, 53683), (46, 53692), (51, 53716), (62, 53800), (67, 53836), (68, 53839), (72, 53884), (76, 53914), (78, 53923), (79, 53926), (85, 53980),

Gene: Lululemon_71 Start: 53777, Stop: 54292, Start Num: 17
Candidate Starts for Lululemon_71:

(Start: 12 @53762 has 16 MA's), (Start: 17 @53777 has 52 MA's), (34, 53879), (42, 53945), (45, 53975), (46, 53981), (61, 54083), (78, 54212), (79, 54215), (81, 54227), (85, 54269),

Gene: Marsus_70 Start: 52876, Stop: 53391, Start Num: 17
Candidate Starts for Marsus_70:
(Start: 12 @52861 has 16 MA's), (Start: 17 @52876 has 52 MA's), (29, 52936), (42, 53044), (46, 53080), (78, 53311), (79, 53314), (81, 53326),

Gene: Maupel_51 Start: 43428, Stop: 43967, Start Num: 11
Candidate Starts for Maupel_51:
(Start: 11 @43428 has 13 MA's), (Start: 13 @43434 has 5 MA's), (Start: 28 @43500 has 1 MA's), (Start: 30 @43512 has 12 MA's), (43, 43635), (46, 43653), (55, 43692), (60, 43752), (62, 43761), (64, 43779), (66, 43788), (76, 43878), (78, 43887), (79, 43890),

Gene: MeganTheeKilla_50 Start: 42789, Stop: 43328, Start Num: 11
Candidate Starts for MeganTheeKilla_50:
(Start: 11 @42789 has 13 MA's), (Start: 13 @42795 has 5 MA's), (Start: 28 @42861 has 1 MA's), (Start: 30 @42873 has 12 MA's), (43, 42996), (46, 43014), (55, 43053), (60, 43113), (62, 43122), (64, 43140), (66, 43149), (76, 43239), (78, 43248), (79, 43251),

Gene: Mildred21_70 Start: 52801, Stop: 53316, Start Num: 16
Candidate Starts for Mildred21_70:
(5, 52675), (7, 52720), (Start: 16 @52801 has 4 MA's), (24, 52834), (29, 52861), (42, 52969), (46, 53005), (71, 53191), (78, 53236), (79, 53239), (81, 53251),

Gene: MindFlayer_72 Start: 53218, Stop: 53751, Start Num: 13
Candidate Starts for MindFlayer_72:
(9, 53194), (Start: 13 @53218 has 5 MA's), (Start: 17 @53230 has 52 MA's), (38, 53371), (39, 53380), (42, 53404), (46, 53440), (49, 53458), (51, 53464), (56, 53488), (62, 53548), (67, 53584), (68, 53587), (69, 53590), (72, 53632), (76, 53662), (78, 53671), (79, 53674), (81, 53686), (85, 53728),

Gene: Moab_52 Start: 44732, Stop: 45187, Start Num: 30
Candidate Starts for Moab_52:
(Start: 11 @44648 has 13 MA's), (Start: 13 @44654 has 5 MA's), (Start: 30 @44732 has 12 MA's), (39, 44813), (43, 44855), (46, 44873), (49, 44891), (59, 44969), (64, 44999), (66, 45008), (69, 45023), (76, 45098), (78, 45107), (79, 45110),

Gene: Mugiwara_73 Start: 53981, Stop: 54502, Start Num: 17
Candidate Starts for Mugiwara_73:
(9, 53945), (Start: 13 @53969 has 5 MA's), (Start: 17 @53981 has 52 MA's), (39, 54131), (42, 54155), (46, 54191), (51, 54215), (56, 54239), (62, 54299), (67, 54335), (68, 54338), (69, 54341), (72, 54383), (76, 54413), (78, 54422), (79, 54425), (81, 54437), (85, 54479),

Gene: MulchMansion_69 Start: 52589, Stop: 53119, Start Num: 12
Candidate Starts for MulchMansion_69:
(Start: 12 @52589 has 16 MA's), (Start: 17 @52604 has 52 MA's), (29, 52664), (42, 52772), (46, 52808), (78, 53039), (79, 53042), (81, 53054),

Gene: Muntaha_49 Start: 44943, Stop: 45395, Start Num: 30
Candidate Starts for Muntaha_49:
(Start: 11 @44865 has 13 MA's), (Start: 30 @44943 has 12 MA's), (34, 44982), (43, 45066), (46, 45084), (62, 45192), (73, 45288), (78, 45315), (79, 45318), (83, 45336), (84, 45342), (86, 45384),

Gene: Navo_70 Start: 53693, Stop: 54208, Start Num: 17
Candidate Starts for Navo_70:
(Start: 12 @53678 has 16 MA's), (Start: 17 @53693 has 52 MA's), (40, 53846), (42, 53861), (44, 53888), (45, 53891), (46, 53897), (61, 53999), (67, 54041), (78, 54128), (79, 54131), (81, 54143),

Gene: NiceHouse_82 Start: 60077, Stop: 60556, Start Num: 22
Candidate Starts for NiceHouse_82:
(8, 59999), (Start: 22 @60077 has 1 MA's), (Start: 28 @60104 has 1 MA's), (34, 60155), (60, 60359), (64, 60386), (75, 60458), (79, 60488),

Gene: NootNoot_68 Start: 52685, Stop: 53200, Start Num: 17
Candidate Starts for NootNoot_68:
(Start: 12 @52670 has 16 MA's), (Start: 17 @52685 has 52 MA's), (40, 52838), (42, 52853), (44, 52880), (45, 52883), (46, 52889), (61, 52991), (67, 53033), (78, 53120), (79, 53123), (81, 53135),

Gene: Nova53_64 Start: 54807, Stop: 55271, Start Num: 27
Candidate Starts for Nova53_64:
(23, 54789), (Start: 27 @54807 has 2 MA's), (37, 54897), (46, 54969), (50, 54990), (75, 55170), (85, 55251),

Gene: PacManQ_71 Start: 53777, Stop: 54292, Start Num: 17
Candidate Starts for PacManQ_71:
(Start: 12 @53762 has 16 MA's), (Start: 17 @53777 has 52 MA's), (34, 53879), (42, 53945), (45, 53975), (46, 53981), (61, 54083), (78, 54212), (79, 54215), (81, 54227), (85, 54269),

Gene: Paradiddles_68 Start: 52934, Stop: 53464, Start Num: 12
Candidate Starts for Paradiddles_68:
(Start: 12 @52934 has 16 MA's), (Start: 17 @52949 has 52 MA's), (40, 53102), (42, 53117), (44, 53144), (45, 53147), (46, 53153), (61, 53255), (67, 53297), (78, 53384), (79, 53387), (81, 53399),

Gene: Patelgo_52 Start: 44919, Stop: 45374, Start Num: 30
Candidate Starts for Patelgo_52:
(Start: 11 @44835 has 13 MA's), (Start: 13 @44841 has 5 MA's), (Start: 30 @44919 has 12 MA's), (39, 45000), (43, 45042), (46, 45060), (49, 45078), (59, 45156), (64, 45186), (66, 45195), (69, 45210), (76, 45285), (78, 45294), (79, 45297),

Gene: Peebs_71 Start: 54116, Stop: 54646, Start Num: 12
Candidate Starts for Peebs_71:
(Start: 12 @54116 has 16 MA's), (Start: 17 @54131 has 52 MA's), (42, 54299), (45, 54329), (46, 54335), (61, 54437), (78, 54566), (79, 54569), (81, 54581), (85, 54623),

Gene: Pepperwood_72 Start: 54264, Stop: 54779, Start Num: 17
Candidate Starts for Pepperwood_72:
(Start: 12 @54249 has 16 MA's), (Start: 17 @54264 has 52 MA's), (42, 54432), (45, 54462), (46, 54468), (61, 54570), (78, 54699), (79, 54702), (81, 54714), (85, 54756),

Gene: Peregrin_91 Start: 55775, Stop: 56260, Start Num: 20
Candidate Starts for Peregrin_91:
(Start: 20 @55775 has 2 MA's), (Start: 30 @55820 has 12 MA's), (54, 55994), (64, 56084), (70, 56117), (75, 56156), (79, 56186),

Gene: Persimmon_68 Start: 52618, Stop: 53133, Start Num: 17
Candidate Starts for Persimmon_68:

(Start: 12 @52603 has 16 MA's), (Start: 17 @52618 has 52 MA's), (40, 52771), (42, 52786), (44, 52813), (45, 52816), (46, 52822), (61, 52924), (67, 52966), (78, 53053), (79, 53056), (81, 53068),

Gene: Phredrick_51 Start: 42694, Stop: 43233, Start Num: 11
Candidate Starts for Phredrick_51:
(Start: 11 @42694 has 13 MA's), (Start: 13 @42700 has 5 MA's), (Start: 28 @42766 has 1 MA's), (Start: 30 @42778 has 12 MA's), (43, 42901), (46, 42919), (55, 42958), (62, 43027), (64, 43045), (66, 43054), (76, 43144), (78, 43153), (79, 43156),

Gene: PinkiePie_70 Start: 53771, Stop: 54286, Start Num: 17
Candidate Starts for PinkiePie_70:
(Start: 12 @53756 has 16 MA's), (Start: 17 @53771 has 52 MA's), (40, 53924), (42, 53939), (44, 53966), (45, 53969), (46, 53975), (61, 54077), (67, 54119), (78, 54206), (79, 54209), (81, 54221),

Gene: PumpkinSpice_73 Start: 53622, Stop: 54143, Start Num: 17
Candidate Starts for PumpkinSpice_73:
(9, 53586), (Start: 13 @53610 has 5 MA's), (Start: 17 @53622 has 52 MA's), (38, 53763), (39, 53772), (42, 53796), (46, 53832), (49, 53850), (51, 53856), (56, 53880), (62, 53940), (67, 53976), (68, 53979), (69, 53982), (72, 54024), (76, 54054), (78, 54063), (79, 54066), (81, 54078), (85, 54120),

Gene: Quaran19_74 Start: 53613, Stop: 54134, Start Num: 17
Candidate Starts for Quaran19_74:
(9, 53577), (Start: 13 @53601 has 5 MA's), (Start: 17 @53613 has 52 MA's), (38, 53754), (39, 53763), (42, 53787), (46, 53823), (49, 53841), (51, 53847), (56, 53871), (62, 53931), (67, 53967), (68, 53970), (69, 53973), (72, 54015), (76, 54045), (78, 54054), (79, 54057), (81, 54069), (85, 54111),

Gene: Rikishi_74 Start: 53528, Stop: 54049, Start Num: 17
Candidate Starts for Rikishi_74:
(9, 53492), (Start: 13 @53516 has 5 MA's), (Start: 17 @53528 has 52 MA's), (38, 53669), (39, 53678), (42, 53702), (46, 53738), (49, 53756), (51, 53762), (56, 53786), (62, 53846), (67, 53882), (68, 53885), (69, 53888), (72, 53930), (76, 53960), (78, 53969), (79, 53972), (81, 53984), (85, 54026),

Gene: Riptide_69 Start: 52417, Stop: 52932, Start Num: 16
Candidate Starts for Riptide_69:
(1, 52240), (2, 52246), (3, 52264), (4, 52285), (Start: 6 @52330 has 1 MA's), (Start: 16 @52417 has 4 MA's), (42, 52585), (46, 52621), (66, 52756), (69, 52771), (71, 52807), (78, 52852), (79, 52855), (81, 52867),

Gene: SaltySpitoon_74 Start: 53622, Stop: 54143, Start Num: 17
Candidate Starts for SaltySpitoon_74:
(9, 53586), (Start: 13 @53610 has 5 MA's), (Start: 17 @53622 has 52 MA's), (38, 53763), (39, 53772), (42, 53796), (46, 53832), (49, 53850), (51, 53856), (56, 53880), (62, 53940), (67, 53976), (68, 53979), (69, 53982), (72, 54024), (76, 54054), (78, 54063), (79, 54066), (81, 54078), (85, 54120),

Gene: Samisti12_72 Start: 55574, Stop: 56089, Start Num: 17
Candidate Starts for Samisti12_72:
(Start: 12 @55559 has 16 MA's), (Start: 17 @55574 has 52 MA's), (34, 55676), (42, 55742), (45, 55772), (46, 55778), (61, 55880), (67, 55922), (78, 56009), (79, 56012), (81, 56024), (85, 56066),

Gene: Scheme_73 Start: 54978, Stop: 55493, Start Num: 17
Candidate Starts for Scheme_73:
(Start: 12 @54963 has 16 MA's), (Start: 17 @54978 has 52 MA's), (42, 55146), (45, 55176), (46, 55182), (61, 55284), (78, 55413), (79, 55416), (81, 55428), (85, 55470),

Gene: SeresaTree_51 Start: 43996, Stop: 44535, Start Num: 11
Candidate Starts for SeresaTree_51:
(Start: 11 @43996 has 13 MA's), (Start: 13 @44002 has 5 MA's), (Start: 25 @44053 has 1 MA's), (Start: 30 @44080 has 12 MA's), (41, 44173), (43, 44203), (46, 44221), (55, 44260), (76, 44446), (78, 44455), (79, 44458), (82, 44473), (84, 44482),

Gene: Sham_48 Start: 44537, Stop: 45076, Start Num: 11
Candidate Starts for Sham_48:
(Start: 11 @44537 has 13 MA's), (Start: 13 @44543 has 5 MA's), (Start: 28 @44609 has 1 MA's), (Start: 30 @44621 has 12 MA's), (43, 44744), (46, 44762), (55, 44801), (68, 44909), (69, 44912), (76, 44987), (78, 44996), (79, 44999), (82, 45014),

Gene: Shuckle_70 Start: 54573, Stop: 55103, Start Num: 12
Candidate Starts for Shuckle_70:
(Start: 12 @54573 has 16 MA's), (Start: 17 @54588 has 52 MA's), (42, 54756), (45, 54786), (46, 54792), (61, 54894), (67, 54936), (78, 55023), (79, 55026), (81, 55038), (85, 55080),

Gene: Sollertia_74 Start: 53588, Stop: 54097, Start Num: 17
Candidate Starts for Sollertia_74:
(9, 53552), (Start: 13 @53576 has 5 MA's), (Start: 17 @53588 has 52 MA's), (38, 53717), (39, 53726), (42, 53750), (44, 53777), (46, 53786), (51, 53810), (56, 53834), (62, 53894), (66, 53921), (67, 53930), (68, 53933), (76, 54008), (78, 54017), (79, 54020), (81, 54032), (85, 54074),

Gene: SparkleGoddess_52 Start: 44763, Stop: 45215, Start Num: 30
Candidate Starts for SparkleGoddess_52:
(Start: 11 @44679 has 13 MA's), (Start: 13 @44685 has 5 MA's), (Start: 30 @44763 has 12 MA's), (43, 44886), (46, 44904), (66, 45039), (74, 45108), (76, 45126), (78, 45135), (79, 45138), (81, 45150),

Gene: Spelly_74 Start: 53577, Stop: 54098, Start Num: 17
Candidate Starts for Spelly_74:
(9, 53541), (Start: 13 @53565 has 5 MA's), (Start: 17 @53577 has 52 MA's), (38, 53718), (39, 53727), (42, 53751), (46, 53787), (49, 53805), (51, 53811), (56, 53835), (62, 53895), (67, 53931), (68, 53934), (69, 53937), (72, 53979), (76, 54009), (78, 54018), (79, 54021), (81, 54033), (85, 54075),

Gene: Spilled_75 Start: 53682, Stop: 54215, Start Num: 13
Candidate Starts for Spilled_75:
(9, 53658), (Start: 13 @53682 has 5 MA's), (Start: 17 @53694 has 52 MA's), (38, 53835), (39, 53844), (42, 53868), (46, 53904), (49, 53922), (51, 53928), (56, 53952), (62, 54012), (67, 54048), (68, 54051), (69, 54054), (72, 54096), (76, 54126), (78, 54135), (79, 54138), (81, 54150), (85, 54192),

Gene: Squillium_71 Start: 53772, Stop: 54287, Start Num: 17
Candidate Starts for Squillium_71:
(Start: 12 @53757 has 16 MA's), (Start: 17 @53772 has 52 MA's), (40, 53925), (42, 53940), (44, 53967), (45, 53970), (46, 53976), (61, 54078), (67, 54120), (78, 54207), (79, 54210), (81, 54222),

Gene: Stanimal_74 Start: 53477, Stop: 53986, Start Num: 17
Candidate Starts for Stanimal_74:
(9, 53441), (Start: 13 @53465 has 5 MA's), (Start: 17 @53477 has 52 MA's), (38, 53606), (39, 53615), (42, 53639), (44, 53666), (46, 53675), (51, 53699), (56, 53723), (62, 53783), (66, 53810), (67, 53819), (68, 53822), (76, 53897), (78, 53906), (79, 53909), (81, 53921), (85, 53963),

Gene: StarPlatinum_74 Start: 54122, Stop: 54643, Start Num: 17

Candidate Starts for StarPlatinum_74:
(9, 54086), (Start: 13 @54110 has 5 MA's), (Start: 17 @54122 has 52 MA's), (35, 54233), (38, 54263), (39, 54272), (42, 54296), (44, 54323), (46, 54332), (51, 54356), (62, 54440), (66, 54467), (67, 54476), (68, 54479), (69, 54482), (72, 54524), (76, 54554), (78, 54563), (79, 54566), (85, 54620),

Gene: Starbow_72 Start: 53598, Stop: 54119, Start Num: 17
Candidate Starts for Starbow_72:
(9, 53562), (Start: 13 @53586 has 5 MA's), (Start: 17 @53598 has 52 MA's), (38, 53739), (39, 53748), (42, 53772), (46, 53808), (49, 53826), (51, 53832), (56, 53856), (62, 53916), (67, 53952), (68, 53955), (69, 53958), (72, 54000), (76, 54030), (78, 54039), (79, 54042), (81, 54054), (85, 54096),

Gene: Stigma_51 Start: 44693, Stop: 45229, Start Num: 11
Candidate Starts for Stigma_51:
(Start: 11 @44693 has 13 MA's), (Start: 13 @44699 has 5 MA's), (Start: 30 @44777 has 12 MA's), (43, 44900), (46, 44918), (66, 45053), (74, 45122), (76, 45140), (78, 45149), (79, 45152), (81, 45164),

Gene: Sushi23_72 Start: 54474, Stop: 55004, Start Num: 12
Candidate Starts for Sushi23_72:
(Start: 12 @54474 has 16 MA's), (Start: 17 @54489 has 52 MA's), (42, 54657), (45, 54687), (46, 54693), (61, 54795), (78, 54924), (79, 54927), (81, 54939), (85, 54981),

Gene: Targaryen_73 Start: 55193, Stop: 55708, Start Num: 17
Candidate Starts for Targaryen_73:
(Start: 12 @55178 has 16 MA's), (Start: 17 @55193 has 52 MA's), (42, 55361), (46, 55397), (47, 55400), (53, 55427), (61, 55499), (66, 55532), (67, 55541), (71, 55583), (78, 55628), (79, 55631), (81, 55643),

Gene: Teutsch_72 Start: 54737, Stop: 55267, Start Num: 12
Candidate Starts for Teutsch_72:
(Start: 12 @54737 has 16 MA's), (Start: 17 @54752 has 52 MA's), (42, 54920), (45, 54950), (46, 54956), (61, 55058), (78, 55187), (79, 55190), (81, 55202), (85, 55244),

Gene: TomSawyer_72 Start: 53204, Stop: 53737, Start Num: 13
Candidate Starts for TomSawyer_72:
(9, 53180), (Start: 13 @53204 has 5 MA's), (Start: 17 @53216 has 52 MA's), (38, 53357), (39, 53366), (42, 53390), (46, 53426), (49, 53444), (51, 53450), (56, 53474), (62, 53534), (67, 53570), (68, 53573), (69, 53576), (72, 53618), (76, 53648), (78, 53657), (79, 53660), (81, 53672), (85, 53714),

Gene: Tomas_76 Start: 55938, Stop: 56459, Start Num: 17
Candidate Starts for Tomas_76:
(Start: 17 @55938 has 52 MA's), (38, 56079), (39, 56088), (42, 56112), (46, 56148), (51, 56172), (52, 56175), (58, 56214), (61, 56250), (67, 56292), (77, 56373), (78, 56379), (79, 56382), (81, 56394), (85, 56436),

Gene: Tribute_70 Start: 53958, Stop: 54473, Start Num: 17
Candidate Starts for Tribute_70:
(Start: 12 @53943 has 16 MA's), (Start: 17 @53958 has 52 MA's), (42, 54126), (45, 54156), (46, 54162), (61, 54264), (78, 54393), (79, 54396), (81, 54408), (85, 54450),

Gene: Trina_93 Start: 63190, Stop: 63669, Start Num: 19
Candidate Starts for Trina_93:
(Start: 19 @63190 has 2 MA's), (31, 63238), (33, 63253), (34, 63271), (40, 63322), (47, 63376), (48, 63382), (57, 63430), (60, 63469), (64, 63496), (75, 63568), (79, 63598),

Gene: TunaTartare_50 Start: 44837, Stop: 45376, Start Num: 11
Candidate Starts for TunaTartare_50:
(Start: 11 @44837 has 13 MA's), (Start: 13 @44843 has 5 MA's), (Start: 28 @44909 has 1 MA's),
(Start: 30 @44921 has 12 MA's), (43, 45044), (46, 45062), (55, 45101), (69, 45212), (76, 45287), (78,
45296), (79, 45299), (82, 45314),

Gene: Wakanda_48 Start: 44802, Stop: 45332, Start Num: 11
Candidate Starts for Wakanda_48:
(Start: 11 @44802 has 13 MA's), (Start: 30 @44880 has 12 MA's), (34, 44919), (43, 45003), (46,
45021), (62, 45129), (73, 45225), (78, 45252), (79, 45255), (83, 45273), (84, 45279), (86, 45321),

Gene: Warpy_76 Start: 54642, Stop: 55172, Start Num: 12
Candidate Starts for Warpy_76:
(Start: 12 @54642 has 16 MA's), (Start: 17 @54657 has 52 MA's), (42, 54825), (46, 54861), (47,
54864), (61, 54963), (62, 54969), (67, 55005), (71, 55047), (78, 55092), (79, 55095), (81, 55107),

Gene: Watermoore_72 Start: 54968, Stop: 55483, Start Num: 17
Candidate Starts for Watermoore_72:
(Start: 12 @54953 has 16 MA's), (Start: 17 @54968 has 52 MA's), (34, 55070), (42, 55136), (45,
55166), (46, 55172), (61, 55274), (78, 55403), (79, 55406), (81, 55418), (85, 55460),

Gene: Weasels2_93 Start: 56930, Stop: 57418, Start Num: 19
Candidate Starts for Weasels2_93:
(Start: 19 @56930 has 2 MA's), (Start: 30 @56978 has 12 MA's), (32, 56996), (34, 57017), (46, 57119),
(64, 57242), (65, 57245), (66, 57251), (75, 57314), (76, 57332), (79, 57344), (80, 57347),

Gene: Westy_52 Start: 44764, Stop: 45216, Start Num: 30
Candidate Starts for Westy_52:
(Start: 11 @44680 has 13 MA's), (Start: 13 @44686 has 5 MA's), (Start: 30 @44764 has 12 MA's), (43,
44887), (46, 44905), (66, 45040), (74, 45109), (76, 45127), (78, 45136), (79, 45139), (81, 45151),

Gene: WhereRU_69 Start: 53209, Stop: 53724, Start Num: 17
Candidate Starts for WhereRU_69:
(Start: 12 @53194 has 16 MA's), (Start: 17 @53209 has 52 MA's), (40, 53362), (42, 53377), (44,
53404), (45, 53407), (46, 53413), (61, 53515), (67, 53557), (78, 53644), (79, 53647), (81, 53659),

Gene: Wipeout_72 Start: 53967, Stop: 54488, Start Num: 17
Candidate Starts for Wipeout_72:
(9, 53931), (Start: 13 @53955 has 5 MA's), (Start: 17 @53967 has 52 MA's), (35, 54078), (38, 54108),
(39, 54117), (42, 54141), (44, 54168), (46, 54177), (49, 54195), (51, 54201), (56, 54225), (62, 54285),
(67, 54321), (68, 54324), (69, 54327), (72, 54369), (76, 54399), (78, 54408), (79, 54411), (81, 54423),
(85, 54465),

Gene: Wofford_73 Start: 54652, Stop: 55173, Start Num: 17
Candidate Starts for Wofford_73:
(9, 54616), (Start: 13 @54640 has 5 MA's), (Start: 17 @54652 has 52 MA's), (26, 54697), (42, 54826),
(46, 54862), (49, 54880), (51, 54886), (56, 54910), (62, 54970), (66, 54997), (67, 55006), (68, 55009),
(73, 55066), (78, 55093), (79, 55096), (85, 55150),

Gene: Yaboi_74 Start: 53565, Stop: 54074, Start Num: 17
Candidate Starts for Yaboi_74:

(9, 53529), (Start: 13 @53553 has 5 MA's), (Start: 17 @53565 has 52 MA's), (38, 53694), (39, 53703), (42, 53727), (44, 53754), (46, 53763), (51, 53787), (56, 53811), (62, 53871), (66, 53898), (67, 53907), (68, 53910), (76, 53985), (78, 53994), (79, 53997), (81, 54009), (85, 54051),