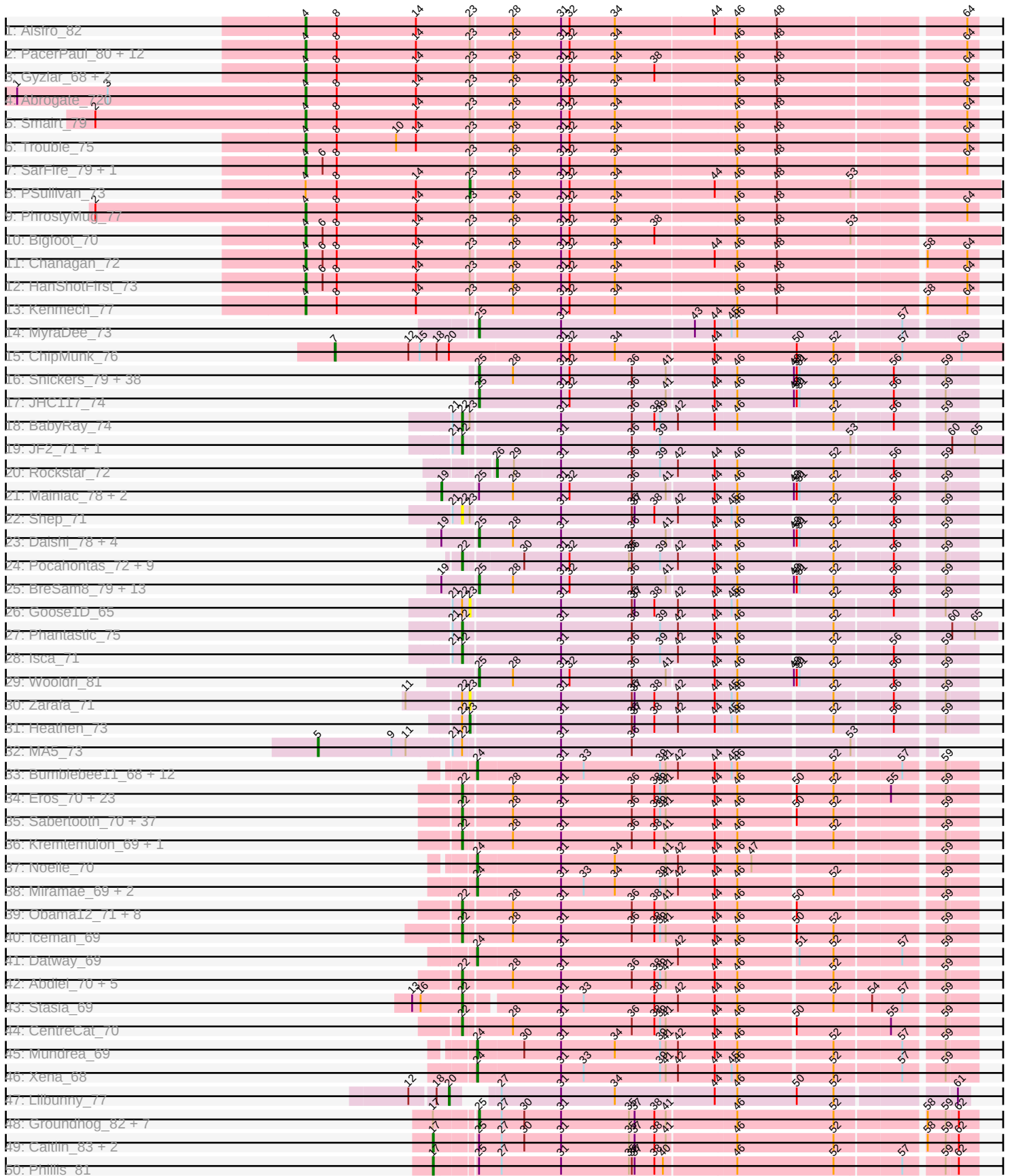


Pham 330467



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 330467 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330467 has 229 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Alsfo_82
- Track 2 : PacerPaul_80, Peterson_74, Makemake_78, Switzer_74, Turj99_71, Museum_75, Crispicous1_70, Manatee_73, Bircsak_76, Magnito_74, Norz_71, SkiPole_84, Arcanine_79
- Track 3 : Gyzlar_68, Maroc7_77, Petruchio_75
- Track 4 : Abrogate_720
- Track 5 : Smairt_79
- Track 6 : Trouble_75
- Track 7 : SarFire_79, Thor_79
- Track 8 : PSullivan_73
- Track 9 : PhrostyMug_77
- Track 10 : Bigfoot_70
- Track 11 : Chanagan_72
- Track 12 : HanShotFirst_73
- Track 13 : Kenmech_77
- Track 14 : MyraDee_73
- Track 15 : ChipMunk_76
- Track 16 : Snickers_79, Anubis_82, SoYo_76, Methuselah_72, Phoebe_80, Dieselweasel_79, Cullens_79, Gwennie_79, Ollie_79, Soshari_81, Penny1_79, Beauxregard13_78, GtownJaz_79, Hercules11_79, Grif_77, Marie_77, Sabinator_77, Fernando_79, LugYA_82, EpicPhail_80, JenCasNa_80, Vix_75, Taurus_80, Croquant_76, MarQuardt_79, Montavir_74, PotatoSplit_80, MoneyMay_78, Farber_79, Phoxy_79, Tiffany_78, Aglet_80, Colbster_75, LBerry_80, Rummer_78, Spike509_79, GingkoMaracino_79, P28Green_79, Grum1_78
- Track 17 : JHC117_74
- Track 18 : BabyRay_74
- Track 19 : JF2_71, JF4_71
- Track 20 : Rockstar_72
- Track 21 : Mainiac_78, DaHudson_78, Sabia_77
- Track 22 : Shep_71
- Track 23 : Daishi_78, HashRod_80, KADY_76, LarryKay_79, TinyPebbles_78
- Track 24 : Pocahontas_72, QuinnKiro_72, Texage_71, Norbert_69, Lambert1_73, Panamaxus_71, Popcicle_73, Margo_73, Hookmount_73, Todacoro_73
- Track 25 : BreSam8_79, Lilith_77, Stagni_76, Pembroke_79, Microwolf_75, Watson_78, MadMarie_77, PGHhamlin_81, MuchMore_82, Iowa_76, Malinsilva_81, Bigflo_76, StepMih_78, AugsMagnumOpus_82
- Track 26 : Goose1D_65

- Track 27 : Phantastic_75
- Track 28 : Isca_71
- Track 29 : Wooldri_81
- Track 30 : Zarafa_71
- Track 31 : Heathen_73
- Track 32 : MA5_73
- Track 33 : Bumblebee11_68, Katalie136_69, Achebe_68, AbbysRanger_69, Perplexer_69, Cici_69, PetiteSangsue_69, Backyardigan_67, Wizard007_69, Morpher26_69, Wile_68, Badger_68, Shygu2_69
- Track 34 : Eros_70, Blackmoor_69, Kingmustik0402_70, TiroTheta9_69, LappelDuVide_70, BubbleTrouble_69, Holli_69, Deano_67, Bartimeaus_70, Roosevelt_68, Florean_70, TinaFeyge_68, Nyxis_69, Alberto7_71, Albee_70, Buckaroo_66, TygerBlood_70, LittleGuy_70, Junimo_66, Baby16_70, Druantia_69, Citius_70, Phontbonne_70, Chaph_70
- Track 35 : Sabertooth_70, Skipitt_69, OKaNui_69, Jaykayelowell_67, Lemur_70, Northrop_67, Sparxx_71, Rocksand_67, Melvin_72, Millski_69, Koan_67, NorthStar_68, Peaches_68, Burger_68, Romney_69, Annyong_69, SenorClean_71, HamSlice_66, Connomayer_70, Taquarus_69, Pumbaa_70, KFPoly_69, YoSam321_70, Bruiser_69, Wilbur_70, Dhanush_70, Koreni_69, Ruin_70, Pipcraft_67, Relief_69, Flux_70, Broseidon_70, SteMason_70, LittleB_70, Bombshell_70, Thanksgivukkah_69, Eapen_70, Caelakin_69
- Track 36 : Kremtemulon_69, Cintron_70
- Track 37 : Noelle_70
- Track 38 : Miramae_69, AvatarAhPeg_69, Stink_69
- Track 39 : Obama12_71, Shaka_68, Happiness_69, BangNhom_68, LHTSCC_72, JetBlade_70, SheldonCooper_70, ChampagnePapi_72, Cerulean_71
- Track 40 : Iceman_69
- Track 41 : Datway_69
- Track 42 : Abdiel_70, Commander_68, Medusa_70, ICleared_69, Lunsford_70, RockieBear_67
- Track 43 : Stasia_69
- Track 44 : CentreCat_70
- Track 45 : Mundrea_69
- Track 46 : Xena_68
- Track 47 : Lilbunny_77
- Track 48 : Groundhog_82, Astro_84, Dixon_83, Saintus_80, Stephig9_83, Danforth_85, NearlyHeadless_85, Smeadley_84
- Track 49 : Caitlin_83, Expelliarmus_81, Roary_86
- Track 50 : Phillis_81

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

The start number called the most often in the published annotations is 22, it was called in 92 of the 217 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Abdiel_70, Albee_70, Alberto7_71, Annyong_69, Baby16_70, BabyRay_74, BangNhom_68, Bartimeaus_70, Blackmoor_69, Bombshell_70, Broseidon_70, Bruiser_69, BubbleTrouble_69, Buckaroo_66, Burger_68, Caelakin_69, CentreCat_70, Cerulean_71, ChampagnePapi_72, Chaph_70, Cintron_70, Citius_70,

Commander_68, Connomayer_70, Deano_67, Dhanush_70, Druantia_69, Eapen_70, Eros_70, Florean_70, Flux_70, HamSlice_66, Happiness_69, Holli_69, Hookmount_73, ICleared_69, Iceman_69, Isca_71, JF2_71, JF4_71, Jaykayelowell_67, JetBlade_70, Junimo_66, KFPoly_69, Kingmustik0402_70, Koan_67, Koreni_69, Kremtemulon_69, LHTSCC_72, Lambert1_73, LappelDuVide_70, Lemur_70, LittleB_70, LittleGuy_70, Lunsford_70, Margo_73, Medusa_70, Melvin_72, Millski_69, Norbert_69, NorthStar_68, Northrop_67, Nyxis_69, OKaNui_69, Obama12_71, Panamaxus_71, Peaches_68, Phantastic_75, Phontbonne_70, Pipcraft_67, Pocahontas_72, Popcicle_73, Pumbaa_70, QuinnKiro_72, Relief_69, RockieBear_67, Rocksand_67, Romney_69, Roosevelt_68, Ruin_70, Sabertooth_70, SenorClean_71, Shaka_68, SheldonCooper_70, Shep_71, Skipitt_69, Sparxx_71, Stasia_69, SteMason_70, Taquarus_69, Texage_71, Thanksgivingkah_69, TinaFeyge_68, TiroTheta9_69, Todacoro_73, TygerBlood_70, Wilbur_70, YoSam321_70,

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

- Goose1D_65, Heathen_73, MA5_73, Zarafa_71,

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

- AbbysRanger_69, Abrogate_720, Achebe_68, Aglet_80, Alsfro_82, Anubis_82, Arcanine_79, Astro_84, AugsMagnumOpus_82, AvatarAhPeg_69, Backyardigan_67, Badger_68, Beauxregard13_78, Bigflo_76, Bigfoot_70, Bircsak_76, BreSam8_79, Bumblebee11_68, Caitlin_83, Chanagan_72, ChipMunk_76, Cici_69, Colbster_75, Crispicous1_70, Croquant_76, Cullens_79, DaHudson_78, Daishi_78, Danforth_85, Datway_69, Dieselweasel_79, Dixon_83, EpicPhail_80, Expelliarmus_81, Farber_79, Fernando_79, GingkoMaracino_79, Grif_77, Groundhog_82, Grum1_78, GtownJaz_79, Gwennie_79, Gyzlar_68, HanShotFirst_73, HashRod_80, Hercules11_79, JHC117_74, JenCasNa_80, KADY_76, Katalie136_69, Kenmech_77, LBerry_80, LarryKay_79, Lilbunny_77, Lilith_77, Lowa_76, LugYA_82, MadMarie_77, Magnito_74, Mainiac_78, Makemake_78, Malinsilva_81, Manatee_73, MarQuardt_79, Marie_77, Maroc7_77, Methuselah_72, Microwolf_75, Miramae_69, MoneyMay_78, Montavir_74, Morpher26_69, MuchMore_82, Mundrea_69, Museum_75, MyraDee_73, NearlyHeadless_85, Noelle_70, Norz_71, Ollie_79, P28Green_79, PGHhamlin_81, PSullivan_73, PacerPaul_80, Pembroke_79, Penny1_79, Perplexer_69, Peterson_74, PetiteSangsue_69, Petruchio_75, Phillis_81, Phoebe_80, Phoxy_79, PhrostyMug_77, PotatoSplit_80, Roary_86, Rockstar_72, Rummer_78, Sabia_77, Sabinator_77, Saintus_80, SarFire_79, Shygu2_69, SkiPole_84, Smairt_79, Smeadley_84, Snickers_79, SoYo_76, Soshari_81, Spike509_79, Stagni_76, StepMih_78, Stephig9_83, Stink_69, Switzer_74, Taurus_80, Thor_79, Tiffany_78, TinyPebbles_78, Trouble_75, Turj99_71, Vix_75, Watson_78, Wile_68, Wizard007_69, Wooldri_81, Xena_68,

Summary by start number:

Start 4:

- Found in 28 of 229 (12.2%) of genes in pham
- Manual Annotations of this start: 27 of 217
- Called 96.4% of time when present
- Phage (with cluster) where this start called: Abrogate_720 (A1), Alsfro_82 (A1), Arcanine_79 (A1), Bigfoot_70 (A1), Bircsak_76 (A1), Chanagan_72 (A1), Crispicous1_70 (A1), Gyzlar_68 (A1), HanShotFirst_73 (A1), Kenmech_77 (A1), Magnito_74 (A1), Makemake_78 (A1), Manatee_73 (A1), Maroc7_77 (A1), Museum_75 (A1), Norz_71 (A1), PacerPaul_80 (A1), Peterson_74 (A1), Petruchio_75

(A1), PhrostyMug_77 (A1), SarFire_79 (A1), SkiPole_84 (A1), Smairt_79 (A1), Switzer_74 (A1), Thor_79 (A1), Trouble_75 (A1), Turj99_71 (A1),

Start 5:

- Found in 1 of 229 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 217
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MA5_73 (A3),

Start 7:

- Found in 1 of 229 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 217
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChipMunk_76 (A2),

Start 17:

- Found in 12 of 229 (5.2%) of genes in pham
- Manual Annotations of this start: 4 of 217
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Caitlin_83 (A8), Expelliarmus_81 (A8), Phillis_81 (A8), Roary_86 (A8),

Start 19:

- Found in 22 of 229 (9.6%) of genes in pham
- Manual Annotations of this start: 3 of 217
- Called 13.6% of time when present
- Phage (with cluster) where this start called: DaHudson_78 (A3), Mainiac_78 (A3), Sabia_77 (A3),

Start 20:

- Found in 2 of 229 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 217
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Lilbunny_77 (A6),

Start 22:

- Found in 102 of 229 (44.5%) of genes in pham
- Manual Annotations of this start: 92 of 217
- Called 96.1% of time when present
- Phage (with cluster) where this start called: Abdiel_70 (A4), Albee_70 (A4), Alberto7_71 (A4), Annyong_69 (A4), Baby16_70 (A4), BabyRay_74 (A3), BangNhóm_68 (A4), Bartimeaus_70 (A4), Blackmoor_69 (A4), Bombshell_70 (A4), Broseidon_70 (A4), Bruiser_69 (A4), BubbleTrouble_69 (A4), Buckaroo_66 (A4), Burger_68 (A4), Caelakin_69 (A4), CentreCat_70 (A4), Cerulean_71 (A4), ChampagnePapi_72 (A4), Chaph_70 (A4), Cintron_70 (A4), Citius_70 (A4), Commander_68 (A4), Connomayer_70 (A4), Deano_67 (A4), Dhanush_70 (A4), Druantia_69 (A4), Eapen_70 (A4), Eros_70 (A4), Florean_70 (A4), Flux_70 (A4), HamSlice_66 (A4), Happiness_69 (A4), Holli_69 (A4), Hookmount_73 (A3), ICleared_69 (A4), Iceman_69 (A4), Isca_71 (A3), JF2_71 (A3), JF4_71 (A3), Jaykayelowell_67 (A4), JetBlade_70 (A4), Junimo_66 (A4), KFPoly_69 (A4), Kingmustik0402_70 (A4), Koan_67 (A4), Koreni_69 (A4), Kremtemulon_69 (A4), LHTSCC_72 (A4), Lambert1_73 (A3), LappelDuVide_70 (A4), Lemur_70 (A4), LittleB_70 (A4), LittleGuy_70 (A4), Lunsford_70 (A4), Margo_73 (A3), Medusa_70

(A4), Melvin_72 (A4), Millski_69 (A4), Norbert_69 (A3), NorthStar_68 (A4), Northrop_67 (A4), Nyxis_69 (A4), OKaNui_69 (A4), Obama12_71 (A4), Panamaxus_71 (A3), Peaches_68 (A4), Phantastic_75 (A3), Phontbonne_70 (A4), Pipcraft_67 (A4), Pocahontas_72 (A3), Popcicle_73 (A3), Pumbaa_70 (A4), QuinnKiro_72 (A3), Relief_69 (A4), RockieBear_67 (A4), Rocksand_67 (A4), Romney_69 (A4), Roosevelt_68 (A4), Ruin_70 (A4), Sabertooth_70 (A4), SenorClean_71 (A4), Shaka_68 (A4), SheldonCooper_70 (A4), Shep_71 (A3), Skipitt_69 (A4), Sparxx_71 (A4), Stasia_69 (A4), SteMason_70 (A4), Taquarus_69 (A4), Texage_71 (A3), Thanksgivukkah_69 (A4), TinaFeyge_68 (A4), TiroTheta9_69 (A4), Todacoro_73 (A3), TygerBlood_70 (A4), Wilbur_70 (A4), YoSam321_70 (A4),

Start 23:

- Found in 33 of 229 (14.4%) of genes in pham
- Manual Annotations of this start: 2 of 217
- Called 12.1% of time when present
- Phage (with cluster) where this start called: Goose1D_65 (A3), Heathen_73 (A3), PSullivan_73 (A1), Zarafa_71 (A3),

Start 24:

- Found in 20 of 229 (8.7%) of genes in pham
- Manual Annotations of this start: 20 of 217
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbysRanger_69 (A4), Achebe_68 (A4), AvatarAhPeg_69 (A4), Backyardigan_67 (A4), Badger_68 (A4), Bumblebee11_68 (A4), Cici_69 (A4), Datway_69 (A4), Katalie136_69 (A4), Miramae_69 (A4), Morpher26_69 (A4), Mundrea_69 (A4), Noelle_70 (A4), Perplexer_69 (A4), PetiteSangsue_69 (A4), Shygu2_69 (A4), Stink_69 (A4), Wile_68 (A4), Wizard007_69 (A4), Xena_68 (A4),

Start 25:

- Found in 76 of 229 (33.2%) of genes in pham
- Manual Annotations of this start: 65 of 217
- Called 90.8% of time when present
- Phage (with cluster) where this start called: Aglet_80 (A3), Anubis_82 (A3), Astro_84 (A8), AugsMagnumOpus_82 (A3), Beauxregard13_78 (A3), Bigflo_76 (A3), BreSam8_79 (A3), Colbster_75 (A3), Croquant_76 (A3), Cullens_79 (A3), Daishi_78 (A3), Danforth_85 (A8), Dieselweasel_79 (A3), Dixon_83 (A8), EpicPhail_80 (A3), Farber_79 (A3), Fernando_79 (A3), GingkoMaracino_79 (A3), Grif_77 (A3), Groundhog_82 (A8), Grum1_78 (A3), GtownJaz_79 (A3), Gwennie_79 (A3), HashRod_80 (A3), Hercules11_79 (A3), JHC117_74 (A3), JenCasNa_80 (A3), KADY_76 (A3), LBerry_80 (A3), LarryKay_79 (A3), Lilith_77 (A3), Lowa_76 (A3), LugYA_82 (A3), MadMarie_77 (A3), Malinsilva_81 (A3), MarQuardt_79 (A3), Marie_77 (A3), Methuselah_72 (A3), Microwolf_75 (A3), MoneyMay_78 (A3), Montavir_74 (A3), MuchMore_82 (A3), MyraDee_73 (A18), NearlyHeadless_85 (A8), Ollie_79 (A3), P28Green_79 (A3), PGHhamlin_81 (A3), Pembroke_79 (A3), Penny1_79 (A3), Phoebe_80 (A3), Phoxy_79 (A3), PotatoSplit_80 (A3), Rummer_78 (A3), Sabinator_77 (A3), Saintus_80 (A8), Smeadley_84 (A8), Snickers_79 (A3), SoYo_76 (A3), Soshari_81 (A3), Spike509_79 (A3), Stagni_76 (A3), StepMih_78 (A3), Stephig9_83 (A8), Taurus_80 (A3), Tiffany_78 (A3), TinyPebbles_78 (A3), Vix_75 (A3), Watson_78 (A3), Wooldri_81 (A3),

Start 26:

- Found in 1 of 229 (0.4%) of genes in pham

- Manual Annotations of this start: 1 of 217
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rockstar_72 (A3),

Summary by clusters:

There are 7 clusters represented in this pham: A18, A1, A3, A2, A4, A6, A8,

Info for manual annotations of cluster A1:

- Start number 4 was manually annotated 27 times for cluster A1.
- Start number 23 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A18:

- Start number 25 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:

- Start number 7 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A3:

- Start number 5 was manually annotated 1 time for cluster A3.
- Start number 19 was manually annotated 3 times for cluster A3.
- Start number 22 was manually annotated 15 times for cluster A3.
- Start number 23 was manually annotated 1 time for cluster A3.
- Start number 25 was manually annotated 56 times for cluster A3.
- Start number 26 was manually annotated 1 time for cluster A3.

Info for manual annotations of cluster A4:

- Start number 22 was manually annotated 77 times for cluster A4.
- Start number 24 was manually annotated 20 times for cluster A4.

Info for manual annotations of cluster A6:

- Start number 20 was manually annotated 1 time for cluster A6.

Info for manual annotations of cluster A8:

- Start number 17 was manually annotated 4 times for cluster A8.
- Start number 25 was manually annotated 8 times for cluster A8.

Gene Information:

Gene: AbbysRanger_69 Start: 44366, Stop: 43866, Start Num: 24

Candidate Starts for AbbysRanger_69:

(Start: 24 @44366 has 20 MA's), (31, 44279), (33, 44255), (39, 44174), (41, 44168), (42, 44156), (44, 44117), (45, 44102), (46, 44096), (52, 44000), (57, 43934), (59, 43898),

Gene: Abdiel_70 Start: 44184, Stop: 43672, Start Num: 22

Candidate Starts for Abdiel_70:

(Start: 22 @44184 has 92 MA's), (28, 44136), (31, 44085), (36, 44010), (38, 43986), (39, 43980), (41, 43974), (44, 43923), (46, 43902), (52, 43806), (59, 43704),

Gene: Abrogate_720 Start: 46995, Stop: 46309, Start Num: 4

Candidate Starts for Abrogate_720:

(1, 47301), (3, 47205), (Start: 4 @46995 has 27 MA's), (8, 46962), (14, 46878), (Start: 23 @46821 has 2 MA's), (28, 46779), (31, 46728), (32, 46719), (34, 46671), (46, 46548), (48, 46506), (64, 46320),

Gene: Achebe_68 Start: 44349, Stop: 43849, Start Num: 24

Candidate Starts for Achebe_68:

(Start: 24 @44349 has 20 MA's), (31, 44262), (33, 44238), (39, 44157), (41, 44151), (42, 44139), (44, 44100), (45, 44085), (46, 44079), (52, 43983), (57, 43917), (59, 43881),

Gene: Aglet_80 Start: 45006, Stop: 44497, Start Num: 25

Candidate Starts for Aglet_80:

(Start: 25 @45006 has 65 MA's), (28, 44970), (31, 44919), (32, 44910), (36, 44844), (41, 44808), (44, 44760), (46, 44739), (49, 44679), (50, 44676), (51, 44673), (52, 44637), (56, 44574), (59, 44529),

Gene: Albee_70 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for Albee_70:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (50, 43832), (52, 43793), (55, 43739), (59, 43691),

Gene: Alberto7_71 Start: 44508, Stop: 43996, Start Num: 22

Candidate Starts for Alberto7_71:

(Start: 22 @44508 has 92 MA's), (28, 44460), (31, 44409), (36, 44334), (38, 44310), (39, 44304), (41, 44298), (44, 44247), (46, 44226), (50, 44169), (52, 44130), (55, 44076), (59, 44028),

Gene: Alsfro_82 Start: 47015, Stop: 46329, Start Num: 4

Candidate Starts for Alsfro_82:

(Start: 4 @47015 has 27 MA's), (8, 46982), (14, 46898), (Start: 23 @46841 has 2 MA's), (28, 46799), (31, 46748), (32, 46739), (34, 46691), (44, 46589), (46, 46568), (48, 46526), (64, 46340),

Gene: Annyong_69 Start: 44216, Stop: 43704, Start Num: 22

Candidate Starts for Annyong_69:

(Start: 22 @44216 has 92 MA's), (28, 44168), (31, 44117), (36, 44042), (38, 44018), (39, 44012), (41, 44006), (44, 43955), (46, 43934), (50, 43877), (52, 43838), (59, 43736),

Gene: Anubis_82 Start: 44892, Stop: 44383, Start Num: 25

Candidate Starts for Anubis_82:

(Start: 25 @44892 has 65 MA's), (28, 44856), (31, 44805), (32, 44796), (36, 44730), (41, 44694), (44, 44646), (46, 44625), (49, 44565), (50, 44562), (51, 44559), (52, 44523), (56, 44460), (59, 44415),

Gene: Arcanine_79 Start: 48385, Stop: 47699, Start Num: 4

Candidate Starts for Arcanine_79:

(Start: 4 @48385 has 27 MA's), (8, 48352), (14, 48268), (Start: 23 @48211 has 2 MA's), (28, 48169), (31, 48118), (32, 48109), (34, 48061), (46, 47938), (48, 47896), (64, 47710),

Gene: Astro_84 Start: 46044, Stop: 45541, Start Num: 25

Candidate Starts for Astro_84:

(Start: 17 @46083 has 4 MA's), (Start: 25 @46044 has 65 MA's), (27, 46020), (30, 45996), (31, 45957), (35, 45885), (37, 45879), (38, 45858), (41, 45846), (46, 45777), (52, 45675), (58, 45591), (59, 45573), (62, 45561),

Gene: AugsMagnumOpus_82 Start: 44994, Stop: 44485, Start Num: 25

Candidate Starts for AugsMagnumOpus_82:

(Start: 19 @45030 has 3 MA's), (Start: 25 @44994 has 65 MA's), (28, 44958), (31, 44907), (32, 44898), (36, 44832), (41, 44796), (44, 44748), (46, 44727), (49, 44667), (50, 44664), (51, 44661), (52, 44625),

(56, 44562), (59, 44517),

Gene: AvatarAhPeg_69 Start: 44245, Stop: 43745, Start Num: 24

Candidate Starts for AvatarAhPeg_69:

(Start: 24 @44245 has 20 MA's), (31, 44158), (33, 44134), (34, 44101), (39, 44053), (41, 44047), (42, 44035), (44, 43996), (46, 43975), (52, 43879), (59, 43777),

Gene: Baby16_70 Start: 44182, Stop: 43670, Start Num: 22

Candidate Starts for Baby16_70:

(Start: 22 @44182 has 92 MA's), (28, 44134), (31, 44083), (36, 44008), (38, 43984), (39, 43978), (41, 43972), (44, 43921), (46, 43900), (50, 43843), (52, 43804), (55, 43750), (59, 43702),

Gene: BabyRay_74 Start: 44621, Stop: 44109, Start Num: 22

Candidate Starts for BabyRay_74:

(21, 44630), (Start: 22 @44621 has 92 MA's), (Start: 23 @44615 has 2 MA's), (31, 44522), (36, 44447), (38, 44423), (39, 44417), (42, 44399), (44, 44360), (46, 44339), (52, 44243), (56, 44186), (59, 44141),

Gene: Backyardigan_67 Start: 44382, Stop: 43882, Start Num: 24

Candidate Starts for Backyardigan_67:

(Start: 24 @44382 has 20 MA's), (31, 44295), (33, 44271), (39, 44190), (41, 44184), (42, 44172), (44, 44133), (45, 44118), (46, 44112), (52, 44016), (57, 43950), (59, 43914),

Gene: Badger_68 Start: 44350, Stop: 43850, Start Num: 24

Candidate Starts for Badger_68:

(Start: 24 @44350 has 20 MA's), (31, 44263), (33, 44239), (39, 44158), (41, 44152), (42, 44140), (44, 44101), (45, 44086), (46, 44080), (52, 43984), (57, 43918), (59, 43882),

Gene: BangNhom_68 Start: 44607, Stop: 44095, Start Num: 22

Candidate Starts for BangNhom_68:

(Start: 22 @44607 has 92 MA's), (28, 44559), (31, 44508), (36, 44433), (38, 44409), (41, 44397), (44, 44346), (46, 44325), (50, 44268), (59, 44127),

Gene: Bartimeaus_70 Start: 44173, Stop: 43661, Start Num: 22

Candidate Starts for Bartimeaus_70:

(Start: 22 @44173 has 92 MA's), (28, 44125), (31, 44074), (36, 43999), (38, 43975), (39, 43969), (41, 43963), (44, 43912), (46, 43891), (50, 43834), (52, 43795), (55, 43741), (59, 43693),

Gene: Beauxregard13_78 Start: 45009, Stop: 44500, Start Num: 25

Candidate Starts for Beauxregard13_78:

(Start: 25 @45009 has 65 MA's), (28, 44973), (31, 44922), (32, 44913), (36, 44847), (41, 44811), (44, 44763), (46, 44742), (49, 44682), (50, 44679), (51, 44676), (52, 44640), (56, 44577), (59, 44532),

Gene: Bigflo_76 Start: 45005, Stop: 44496, Start Num: 25

Candidate Starts for Bigflo_76:

(Start: 19 @45041 has 3 MA's), (Start: 25 @45005 has 65 MA's), (28, 44969), (31, 44918), (32, 44909), (36, 44843), (41, 44807), (44, 44759), (46, 44738), (49, 44678), (50, 44675), (51, 44672), (52, 44636), (56, 44573), (59, 44528),

Gene: Bigfoot_70 Start: 46517, Stop: 45807, Start Num: 4

Candidate Starts for Bigfoot_70:

(Start: 4 @46517 has 27 MA's), (6, 46499), (8, 46484), (14, 46400), (Start: 23 @46343 has 2 MA's), (28, 46301), (31, 46250), (32, 46241), (34, 46193), (38, 46151), (46, 46070), (48, 46028), (53, 45950),

Gene: Bircsak_76 Start: 49112, Stop: 48426, Start Num: 4

Candidate Starts for Bircsak_76:

(Start: 4 @49112 has 27 MA's), (8, 49079), (14, 48995), (Start: 23 @48938 has 2 MA's), (28, 48896), (31, 48845), (32, 48836), (34, 48788), (46, 48665), (48, 48623), (64, 48437),

Gene: Blackmoor_69 Start: 44173, Stop: 43661, Start Num: 22

Candidate Starts for Blackmoor_69:

(Start: 22 @44173 has 92 MA's), (28, 44125), (31, 44074), (36, 43999), (38, 43975), (39, 43969), (41, 43963), (44, 43912), (46, 43891), (50, 43834), (52, 43795), (55, 43741), (59, 43693),

Gene: Bombshell_70 Start: 44168, Stop: 43656, Start Num: 22

Candidate Starts for Bombshell_70:

(Start: 22 @44168 has 92 MA's), (28, 44120), (31, 44069), (36, 43994), (38, 43970), (39, 43964), (41, 43958), (44, 43907), (46, 43886), (50, 43829), (52, 43790), (59, 43688),

Gene: BreSam8_79 Start: 44999, Stop: 44490, Start Num: 25

Candidate Starts for BreSam8_79:

(Start: 19 @45035 has 3 MA's), (Start: 25 @44999 has 65 MA's), (28, 44963), (31, 44912), (32, 44903), (36, 44837), (41, 44801), (44, 44753), (46, 44732), (49, 44672), (50, 44669), (51, 44666), (52, 44630), (56, 44567), (59, 44522),

Gene: Broseidon_70 Start: 44174, Stop: 43662, Start Num: 22

Candidate Starts for Broseidon_70:

(Start: 22 @44174 has 92 MA's), (28, 44126), (31, 44075), (36, 44000), (38, 43976), (39, 43970), (41, 43964), (44, 43913), (46, 43892), (50, 43835), (52, 43796), (59, 43694),

Gene: Bruiser_69 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for Bruiser_69:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (50, 43832), (52, 43793), (59, 43691),

Gene: BubbleTrouble_69 Start: 44198, Stop: 43686, Start Num: 22

Candidate Starts for BubbleTrouble_69:

(Start: 22 @44198 has 92 MA's), (28, 44150), (31, 44099), (36, 44024), (38, 44000), (39, 43994), (41, 43988), (44, 43937), (46, 43916), (50, 43859), (52, 43820), (55, 43766), (59, 43718),

Gene: Buckaroo_66 Start: 44175, Stop: 43663, Start Num: 22

Candidate Starts for Buckaroo_66:

(Start: 22 @44175 has 92 MA's), (28, 44127), (31, 44076), (36, 44001), (38, 43977), (39, 43971), (41, 43965), (44, 43914), (46, 43893), (50, 43836), (52, 43797), (55, 43743), (59, 43695),

Gene: Bumblebee11_68 Start: 44352, Stop: 43852, Start Num: 24

Candidate Starts for Bumblebee11_68:

(Start: 24 @44352 has 20 MA's), (31, 44265), (33, 44241), (39, 44160), (41, 44154), (42, 44142), (44, 44103), (45, 44088), (46, 44082), (52, 43986), (57, 43920), (59, 43884),

Gene: Burger_68 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for Burger_68:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (50, 43832), (52, 43793), (59, 43691),

Gene: Caelakin_69 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for Caelakin_69:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (50, 43832), (52, 43793), (59, 43691),

Gene: Caitlin_83 Start: 45775, Stop: 45233, Start Num: 17

Candidate Starts for Caitlin_83:

(Start: 17 @45775 has 4 MA's), (Start: 25 @45736 has 65 MA's), (27, 45712), (30, 45688), (31, 45649), (35, 45577), (37, 45571), (38, 45550), (41, 45538), (46, 45469), (52, 45367), (58, 45283), (59, 45265), (62, 45253),

Gene: CentreCat_70 Start: 44210, Stop: 43698, Start Num: 22

Candidate Starts for CentreCat_70:

(Start: 22 @44210 has 92 MA's), (28, 44162), (31, 44111), (36, 44036), (38, 44012), (39, 44006), (41, 44000), (44, 43949), (46, 43928), (50, 43871), (55, 43778), (59, 43730),

Gene: Cerulean_71 Start: 44608, Stop: 44096, Start Num: 22

Candidate Starts for Cerulean_71:

(Start: 22 @44608 has 92 MA's), (28, 44560), (31, 44509), (36, 44434), (38, 44410), (41, 44398), (44, 44347), (46, 44326), (50, 44269), (59, 44128),

Gene: ChampagnePapi_72 Start: 44607, Stop: 44095, Start Num: 22

Candidate Starts for ChampagnePapi_72:

(Start: 22 @44607 has 92 MA's), (28, 44559), (31, 44508), (36, 44433), (38, 44409), (41, 44397), (44, 44346), (46, 44325), (50, 44268), (59, 44127),

Gene: Chanagan_72 Start: 44969, Stop: 44283, Start Num: 4

Candidate Starts for Chanagan_72:

(Start: 4 @44969 has 27 MA's), (6, 44951), (8, 44936), (14, 44852), (Start: 23 @44795 has 2 MA's), (28, 44753), (31, 44702), (32, 44693), (34, 44645), (44, 44543), (46, 44522), (48, 44480), (58, 44336), (64, 44294),

Gene: Chaph_70 Start: 44182, Stop: 43670, Start Num: 22

Candidate Starts for Chaph_70:

(Start: 22 @44182 has 92 MA's), (28, 44134), (31, 44083), (36, 44008), (38, 43984), (39, 43978), (41, 43972), (44, 43921), (46, 43900), (50, 43843), (52, 43804), (55, 43750), (59, 43702),

Gene: ChipMunk_76 Start: 46976, Stop: 46281, Start Num: 7

Candidate Starts for ChipMunk_76:

(Start: 7 @46976 has 1 MA's), (12, 46898), (15, 46886), (18, 46868), (Start: 20 @46856 has 1 MA's), (31, 46739), (32, 46730), (34, 46682), (44, 46580), (50, 46493), (52, 46454), (57, 46391), (63, 46328),

Gene: Cici_69 Start: 44367, Stop: 43867, Start Num: 24

Candidate Starts for Cici_69:

(Start: 24 @44367 has 20 MA's), (31, 44280), (33, 44256), (39, 44175), (41, 44169), (42, 44157), (44, 44118), (45, 44103), (46, 44097), (52, 44001), (57, 43935), (59, 43899),

Gene: Cintron_70 Start: 44321, Stop: 43809, Start Num: 22

Candidate Starts for Cintron_70:

(Start: 22 @44321 has 92 MA's), (28, 44273), (31, 44222), (36, 44147), (38, 44123), (41, 44111), (44, 44060), (46, 44039), (52, 43943), (59, 43841),

Gene: Citius_70 Start: 44192, Stop: 43680, Start Num: 22

Candidate Starts for Citius_70:

(Start: 22 @44192 has 92 MA's), (28, 44144), (31, 44093), (36, 44018), (38, 43994), (39, 43988), (41, 43982), (44, 43931), (46, 43910), (50, 43853), (52, 43814), (55, 43760), (59, 43712),

Gene: Colbster_75 Start: 45009, Stop: 44500, Start Num: 25

Candidate Starts for Colbster_75:

(Start: 25 @45009 has 65 MA's), (28, 44973), (31, 44922), (32, 44913), (36, 44847), (41, 44811), (44, 44763), (46, 44742), (49, 44682), (50, 44679), (51, 44676), (52, 44640), (56, 44577), (59, 44532),

Gene: Commander_68 Start: 44170, Stop: 43658, Start Num: 22

Candidate Starts for Commander_68:

(Start: 22 @44170 has 92 MA's), (28, 44122), (31, 44071), (36, 43996), (38, 43972), (39, 43966), (41, 43960), (44, 43909), (46, 43888), (52, 43792), (59, 43690),

Gene: Connomayer_70 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for Connomayer_70:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (50, 43832), (52, 43793), (59, 43691),

Gene: Crispicous1_70 Start: 44651, Stop: 43965, Start Num: 4

Candidate Starts for Crispicous1_70:

(Start: 4 @44651 has 27 MA's), (8, 44618), (14, 44534), (Start: 23 @44477 has 2 MA's), (28, 44435), (31, 44384), (32, 44375), (34, 44327), (46, 44204), (48, 44162), (64, 43976),

Gene: Croquant_76 Start: 45006, Stop: 44497, Start Num: 25

Candidate Starts for Croquant_76:

(Start: 25 @45006 has 65 MA's), (28, 44970), (31, 44919), (32, 44910), (36, 44844), (41, 44808), (44, 44760), (46, 44739), (49, 44679), (50, 44676), (51, 44673), (52, 44637), (56, 44574), (59, 44529),

Gene: Cullens_79 Start: 45008, Stop: 44499, Start Num: 25

Candidate Starts for Cullens_79:

(Start: 25 @45008 has 65 MA's), (28, 44972), (31, 44921), (32, 44912), (36, 44846), (41, 44810), (44, 44762), (46, 44741), (49, 44681), (50, 44678), (51, 44675), (52, 44639), (56, 44576), (59, 44531),

Gene: DaHudson_78 Start: 45034, Stop: 44489, Start Num: 19

Candidate Starts for DaHudson_78:

(Start: 19 @45034 has 3 MA's), (Start: 25 @44998 has 65 MA's), (28, 44962), (31, 44911), (32, 44902), (36, 44836), (41, 44800), (44, 44752), (46, 44731), (49, 44671), (50, 44668), (51, 44665), (52, 44629), (56, 44566), (59, 44521),

Gene: Daishi_78 Start: 43873, Stop: 43364, Start Num: 25

Candidate Starts for Daishi_78:

(Start: 19 @43909 has 3 MA's), (Start: 25 @43873 has 65 MA's), (28, 43837), (31, 43786), (36, 43711), (41, 43675), (44, 43627), (46, 43606), (49, 43546), (50, 43543), (51, 43540), (52, 43504), (56, 43441), (59, 43396),

Gene: Danforth_85 Start: 46121, Stop: 45618, Start Num: 25

Candidate Starts for Danforth_85:

(Start: 17 @46160 has 4 MA's), (Start: 25 @46121 has 65 MA's), (27, 46097), (30, 46073), (31, 46034), (35, 45962), (37, 45956), (38, 45935), (41, 45923), (46, 45854), (52, 45752), (58, 45668), (59, 45650), (62, 45638),

Gene: Datway_69 Start: 44341, Stop: 43841, Start Num: 24

Candidate Starts for Datway_69:

(Start: 24 @44341 has 20 MA's), (31, 44254), (42, 44131), (44, 44092), (46, 44071), (51, 44011), (52, 43975), (57, 43909), (59, 43873),

Gene: Deano_67 Start: 44179, Stop: 43667, Start Num: 22

Candidate Starts for Deano_67:

(Start: 22 @44179 has 92 MA's), (28, 44131), (31, 44080), (36, 44005), (38, 43981), (39, 43975), (41, 43969), (44, 43918), (46, 43897), (50, 43840), (52, 43801), (55, 43747), (59, 43699),

Gene: Dhanush_70 Start: 44174, Stop: 43662, Start Num: 22

Candidate Starts for Dhanush_70:

(Start: 22 @44174 has 92 MA's), (28, 44126), (31, 44075), (36, 44000), (38, 43976), (39, 43970), (41, 43964), (44, 43913), (46, 43892), (50, 43835), (52, 43796), (59, 43694),

Gene: Dieselweasel_79 Start: 45007, Stop: 44498, Start Num: 25

Candidate Starts for Dieselweasel_79:

(Start: 25 @45007 has 65 MA's), (28, 44971), (31, 44920), (32, 44911), (36, 44845), (41, 44809), (44, 44761), (46, 44740), (49, 44680), (50, 44677), (51, 44674), (52, 44638), (56, 44575), (59, 44530),

Gene: Dixon_83 Start: 45603, Stop: 45100, Start Num: 25

Candidate Starts for Dixon_83:

(Start: 17 @45642 has 4 MA's), (Start: 25 @45603 has 65 MA's), (27, 45579), (30, 45555), (31, 45516), (35, 45444), (37, 45438), (38, 45417), (41, 45405), (46, 45336), (52, 45234), (58, 45150), (59, 45132), (62, 45120),

Gene: Druantia_69 Start: 44174, Stop: 43662, Start Num: 22

Candidate Starts for Druantia_69:

(Start: 22 @44174 has 92 MA's), (28, 44126), (31, 44075), (36, 44000), (38, 43976), (39, 43970), (41, 43964), (44, 43913), (46, 43892), (50, 43835), (52, 43796), (55, 43742), (59, 43694),

Gene: Eapen_70 Start: 44166, Stop: 43654, Start Num: 22

Candidate Starts for Eapen_70:

(Start: 22 @44166 has 92 MA's), (28, 44118), (31, 44067), (36, 43992), (38, 43968), (39, 43962), (41, 43956), (44, 43905), (46, 43884), (50, 43827), (52, 43788), (59, 43686),

Gene: EpicPhail_80 Start: 45009, Stop: 44500, Start Num: 25

Candidate Starts for EpicPhail_80:

(Start: 25 @45009 has 65 MA's), (28, 44973), (31, 44922), (32, 44913), (36, 44847), (41, 44811), (44, 44763), (46, 44742), (49, 44682), (50, 44679), (51, 44676), (52, 44640), (56, 44577), (59, 44532),

Gene: Eros_70 Start: 44173, Stop: 43661, Start Num: 22

Candidate Starts for Eros_70:

(Start: 22 @44173 has 92 MA's), (28, 44125), (31, 44074), (36, 43999), (38, 43975), (39, 43969), (41, 43963), (44, 43912), (46, 43891), (50, 43834), (52, 43795), (55, 43741), (59, 43693),

Gene: Expelliarmus_81 Start: 45856, Stop: 45314, Start Num: 17

Candidate Starts for Expelliarmus_81:

(Start: 17 @45856 has 4 MA's), (Start: 25 @45817 has 65 MA's), (27, 45793), (30, 45769), (31, 45730), (35, 45658), (37, 45652), (38, 45631), (41, 45619), (46, 45550), (52, 45448), (58, 45364), (59, 45346), (62, 45334),

Gene: Farber_79 Start: 44995, Stop: 44486, Start Num: 25

Candidate Starts for Farber_79:

(Start: 25 @44995 has 65 MA's), (28, 44959), (31, 44908), (32, 44899), (36, 44833), (41, 44797), (44, 44749), (46, 44728), (49, 44668), (50, 44665), (51, 44662), (52, 44626), (56, 44563), (59, 44518),

Gene: Fernando_79 Start: 45008, Stop: 44499, Start Num: 25

Candidate Starts for Fernando_79:

(Start: 25 @45008 has 65 MA's), (28, 44972), (31, 44921), (32, 44912), (36, 44846), (41, 44810), (44, 44762), (46, 44741), (49, 44681), (50, 44678), (51, 44675), (52, 44639), (56, 44576), (59, 44531),

Gene: Florean_70 Start: 44170, Stop: 43658, Start Num: 22

Candidate Starts for Florean_70:

(Start: 22 @44170 has 92 MA's), (28, 44122), (31, 44071), (36, 43996), (38, 43972), (39, 43966), (41, 43960), (44, 43909), (46, 43888), (50, 43831), (52, 43792), (55, 43738), (59, 43690),

Gene: Flux_70 Start: 44170, Stop: 43658, Start Num: 22

Candidate Starts for Flux_70:

(Start: 22 @44170 has 92 MA's), (28, 44122), (31, 44071), (36, 43996), (38, 43972), (39, 43966), (41, 43960), (44, 43909), (46, 43888), (50, 43831), (52, 43792), (59, 43690),

Gene: GingkoMaracino_79 Start: 44891, Stop: 44382, Start Num: 25

Candidate Starts for GingkoMaracino_79:

(Start: 25 @44891 has 65 MA's), (28, 44855), (31, 44804), (32, 44795), (36, 44729), (41, 44693), (44, 44645), (46, 44624), (49, 44564), (50, 44561), (51, 44558), (52, 44522), (56, 44459), (59, 44414),

Gene: Goose1D_65 Start: 40785, Stop: 40279, Start Num: 23

Candidate Starts for Goose1D_65:

(21, 40800), (Start: 22 @40791 has 92 MA's), (Start: 23 @40785 has 2 MA's), (31, 40692), (36, 40617), (37, 40614), (38, 40593), (42, 40569), (44, 40530), (45, 40515), (46, 40509), (52, 40413), (56, 40356), (59, 40311),

Gene: Grif_77 Start: 45082, Stop: 44573, Start Num: 25

Candidate Starts for Grif_77:

(Start: 25 @45082 has 65 MA's), (28, 45046), (31, 44995), (32, 44986), (36, 44920), (41, 44884), (44, 44836), (46, 44815), (49, 44755), (50, 44752), (51, 44749), (52, 44713), (56, 44650), (59, 44605),

Gene: Groundhog_82 Start: 45873, Stop: 45370, Start Num: 25

Candidate Starts for Groundhog_82:

(Start: 17 @45912 has 4 MA's), (Start: 25 @45873 has 65 MA's), (27, 45849), (30, 45825), (31, 45786), (35, 45714), (37, 45708), (38, 45687), (41, 45675), (46, 45606), (52, 45504), (58, 45420), (59, 45402), (62, 45390),

Gene: Grum1_78 Start: 45008, Stop: 44499, Start Num: 25

Candidate Starts for Grum1_78:

(Start: 25 @45008 has 65 MA's), (28, 44972), (31, 44921), (32, 44912), (36, 44846), (41, 44810), (44, 44762), (46, 44741), (49, 44681), (50, 44678), (51, 44675), (52, 44639), (56, 44576), (59, 44531),

Gene: GtownJaz_79 Start: 45006, Stop: 44497, Start Num: 25

Candidate Starts for GtownJaz_79:

(Start: 25 @45006 has 65 MA's), (28, 44970), (31, 44919), (32, 44910), (36, 44844), (41, 44808), (44, 44760), (46, 44739), (49, 44679), (50, 44676), (51, 44673), (52, 44637), (56, 44574), (59, 44529),

Gene: Gwennie_79 Start: 45009, Stop: 44500, Start Num: 25

Candidate Starts for Gwennie_79:

(Start: 25 @45009 has 65 MA's), (28, 44973), (31, 44922), (32, 44913), (36, 44847), (41, 44811), (44, 44763), (46, 44742), (49, 44682), (50, 44679), (51, 44676), (52, 44640), (56, 44577), (59, 44532),

Gene: Gyzlar_68 Start: 43426, Stop: 42740, Start Num: 4

Candidate Starts for Gyzlar_68:

(Start: 4 @43426 has 27 MA's), (8, 43393), (14, 43309), (Start: 23 @43252 has 2 MA's), (28, 43210), (31, 43159), (32, 43150), (34, 43102), (38, 43060), (46, 42979), (48, 42937), (64, 42751),

Gene: HamSlice_66 Start: 44170, Stop: 43658, Start Num: 22

Candidate Starts for HamSlice_66:

(Start: 22 @44170 has 92 MA's), (28, 44122), (31, 44071), (36, 43996), (38, 43972), (39, 43966), (41, 43960), (44, 43909), (46, 43888), (50, 43831), (52, 43792), (59, 43690),

Gene: HanShotFirst_73 Start: 47020, Stop: 46334, Start Num: 4

Candidate Starts for HanShotFirst_73:

(Start: 4 @47020 has 27 MA's), (6, 47002), (8, 46987), (14, 46903), (Start: 23 @46846 has 2 MA's), (28, 46804), (31, 46753), (32, 46744), (34, 46696), (46, 46573), (48, 46531), (64, 46345),

Gene: Happiness_69 Start: 44190, Stop: 43678, Start Num: 22

Candidate Starts for Happiness_69:

(Start: 22 @44190 has 92 MA's), (28, 44142), (31, 44091), (36, 44016), (38, 43992), (41, 43980), (44, 43929), (46, 43908), (50, 43851), (59, 43710),

Gene: HashRod_80 Start: 45033, Stop: 44524, Start Num: 25

Candidate Starts for HashRod_80:

(Start: 19 @45069 has 3 MA's), (Start: 25 @45033 has 65 MA's), (28, 44997), (31, 44946), (36, 44871), (41, 44835), (44, 44787), (46, 44766), (49, 44706), (50, 44703), (51, 44700), (52, 44664), (56, 44601), (59, 44556),

Gene: Heathen_73 Start: 44400, Stop: 43894, Start Num: 23

Candidate Starts for Heathen_73:

(Start: 22 @44406 has 92 MA's), (Start: 23 @44400 has 2 MA's), (31, 44307), (36, 44232), (37, 44229), (38, 44208), (42, 44184), (44, 44145), (45, 44130), (46, 44124), (52, 44028), (56, 43971), (59, 43926),

Gene: Hercules11_79 Start: 45017, Stop: 44508, Start Num: 25

Candidate Starts for Hercules11_79:

(Start: 25 @45017 has 65 MA's), (28, 44981), (31, 44930), (32, 44921), (36, 44855), (41, 44819), (44, 44771), (46, 44750), (49, 44690), (50, 44687), (51, 44684), (52, 44648), (56, 44585), (59, 44540),

Gene: Holli_69 Start: 43961, Stop: 43449, Start Num: 22

Candidate Starts for Holli_69:

(Start: 22 @43961 has 92 MA's), (28, 43913), (31, 43862), (36, 43787), (38, 43763), (39, 43757), (41, 43751), (44, 43700), (46, 43679), (50, 43622), (52, 43583), (55, 43529), (59, 43481),

Gene: Hookmount_73 Start: 44647, Stop: 44138, Start Num: 22

Candidate Starts for Hookmount_73:

(Start: 22 @44647 has 92 MA's), (30, 44590), (31, 44551), (32, 44542), (35, 44479), (36, 44476), (39, 44446), (42, 44428), (44, 44389), (46, 44368), (52, 44272), (56, 44215), (59, 44170),

Gene: ICleared_69 Start: 44239, Stop: 43727, Start Num: 22

Candidate Starts for ICleared_69:

(Start: 22 @44239 has 92 MA's), (28, 44191), (31, 44140), (36, 44065), (38, 44041), (39, 44035), (41, 44029), (44, 43978), (46, 43957), (52, 43861), (59, 43759),

Gene: Iceman_69 Start: 44460, Stop: 43948, Start Num: 22

Candidate Starts for Iceman_69:

(Start: 22 @44460 has 92 MA's), (28, 44412), (31, 44361), (36, 44286), (38, 44262), (39, 44256), (41, 44250), (44, 44199), (46, 44178), (50, 44121), (52, 44082), (59, 43980),

Gene: Isca_71 Start: 44174, Stop: 43662, Start Num: 22

Candidate Starts for Isca_71:

(21, 44183), (Start: 22 @44174 has 92 MA's), (31, 44075), (36, 44000), (39, 43970), (42, 43952), (44, 43913), (46, 43892), (52, 43796), (56, 43739), (59, 43694),

Gene: JF2_71 Start: 42870, Stop: 42328, Start Num: 22

Candidate Starts for JF2_71:

(21, 42879), (Start: 22 @42870 has 92 MA's), (31, 42771), (36, 42696), (39, 42666), (53, 42474), (60, 42384), (65, 42360),

Gene: JF4_71 Start: 42870, Stop: 42328, Start Num: 22

Candidate Starts for JF4_71:

(21, 42879), (Start: 22 @42870 has 92 MA's), (31, 42771), (36, 42696), (39, 42666), (53, 42474), (60, 42384), (65, 42360),

Gene: JHC117_74 Start: 45003, Stop: 44494, Start Num: 25

Candidate Starts for JHC117_74:

(Start: 25 @45003 has 65 MA's), (31, 44916), (32, 44907), (36, 44841), (41, 44805), (44, 44757), (46, 44736), (49, 44676), (50, 44673), (51, 44670), (52, 44634), (56, 44571), (59, 44526),

Gene: Jaykayelowell_67 Start: 44164, Stop: 43652, Start Num: 22

Candidate Starts for Jaykayelowell_67:

(Start: 22 @44164 has 92 MA's), (28, 44116), (31, 44065), (36, 43990), (38, 43966), (39, 43960), (41, 43954), (44, 43903), (46, 43882), (50, 43825), (52, 43786), (59, 43684),

Gene: JenCasNa_80 Start: 45008, Stop: 44499, Start Num: 25

Candidate Starts for JenCasNa_80:

(Start: 25 @45008 has 65 MA's), (28, 44972), (31, 44921), (32, 44912), (36, 44846), (41, 44810), (44, 44762), (46, 44741), (49, 44681), (50, 44678), (51, 44675), (52, 44639), (56, 44576), (59, 44531),

Gene: JetBlade_70 Start: 44198, Stop: 43686, Start Num: 22

Candidate Starts for JetBlade_70:

(Start: 22 @44198 has 92 MA's), (28, 44150), (31, 44099), (36, 44024), (38, 44000), (41, 43988), (44, 43937), (46, 43916), (50, 43859), (59, 43718),

Gene: Junimo_66 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for Junimo_66:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (50, 43832), (52, 43793), (55, 43739), (59, 43691),

Gene: KADY_76 Start: 45033, Stop: 44524, Start Num: 25

Candidate Starts for KADY_76:

(Start: 19 @45069 has 3 MA's), (Start: 25 @45033 has 65 MA's), (28, 44997), (31, 44946), (36, 44871), (41, 44835), (44, 44787), (46, 44766), (49, 44706), (50, 44703), (51, 44700), (52, 44664), (56, 44601), (59, 44556),

Gene: KFPoly_69 Start: 44165, Stop: 43653, Start Num: 22

Candidate Starts for KFPoly_69:

(Start: 22 @44165 has 92 MA's), (28, 44117), (31, 44066), (36, 43991), (38, 43967), (39, 43961), (41, 43955), (44, 43904), (46, 43883), (50, 43826), (52, 43787), (59, 43685),

Gene: Katalie136_69 Start: 44352, Stop: 43852, Start Num: 24

Candidate Starts for Katalie136_69:

(Start: 24 @44352 has 20 MA's), (31, 44265), (33, 44241), (39, 44160), (41, 44154), (42, 44142), (44, 44103), (45, 44088), (46, 44082), (52, 43986), (57, 43920), (59, 43884),

Gene: Kenmech_77 Start: 47527, Stop: 46841, Start Num: 4

Candidate Starts for Kenmech_77:

(Start: 4 @47527 has 27 MA's), (8, 47494), (14, 47410), (Start: 23 @47353 has 2 MA's), (28, 47311), (31, 47260), (32, 47251), (34, 47203), (46, 47080), (48, 47038), (58, 46894), (64, 46852),

Gene: Kingmustik0402_70 Start: 44160, Stop: 43648, Start Num: 22

Candidate Starts for Kingmustik0402_70:

(Start: 22 @44160 has 92 MA's), (28, 44112), (31, 44061), (36, 43986), (38, 43962), (39, 43956), (41, 43950), (44, 43899), (46, 43878), (50, 43821), (52, 43782), (55, 43728), (59, 43680),

Gene: Koan_67 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for Koan_67:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (50, 43832), (52, 43793), (59, 43691),

Gene: Koreni_69 Start: 43852, Stop: 43340, Start Num: 22

Candidate Starts for Koreni_69:

(Start: 22 @43852 has 92 MA's), (28, 43804), (31, 43753), (36, 43678), (38, 43654), (39, 43648), (41, 43642), (44, 43591), (46, 43570), (50, 43513), (52, 43474), (59, 43372),

Gene: Kremtemulon_69 Start: 44304, Stop: 43792, Start Num: 22

Candidate Starts for Kremtemulon_69:

(Start: 22 @44304 has 92 MA's), (28, 44256), (31, 44205), (36, 44130), (38, 44106), (41, 44094), (44, 44043), (46, 44022), (52, 43926), (59, 43824),

Gene: LBerry_80 Start: 45009, Stop: 44500, Start Num: 25

Candidate Starts for LBerry_80:

(Start: 25 @45009 has 65 MA's), (28, 44973), (31, 44922), (32, 44913), (36, 44847), (41, 44811), (44, 44763), (46, 44742), (49, 44682), (50, 44679), (51, 44676), (52, 44640), (56, 44577), (59, 44532),

Gene: LHTSCC_72 Start: 44607, Stop: 44095, Start Num: 22

Candidate Starts for LHTSCC_72:

(Start: 22 @44607 has 92 MA's), (28, 44559), (31, 44508), (36, 44433), (38, 44409), (41, 44397), (44, 44346), (46, 44325), (50, 44268), (59, 44127),

Gene: Lambert1_73 Start: 44648, Stop: 44139, Start Num: 22

Candidate Starts for Lambert1_73:

(Start: 22 @44648 has 92 MA's), (30, 44591), (31, 44552), (32, 44543), (35, 44480), (36, 44477), (39, 44447), (42, 44429), (44, 44390), (46, 44369), (52, 44273), (56, 44216), (59, 44171),

Gene: LappelDuVide_70 Start: 44170, Stop: 43658, Start Num: 22

Candidate Starts for LappelDuVide_70:

(Start: 22 @44170 has 92 MA's), (28, 44122), (31, 44071), (36, 43996), (38, 43972), (39, 43966), (41, 43960), (44, 43909), (46, 43888), (50, 43831), (52, 43792), (55, 43738), (59, 43690),

Gene: LarryKay_79 Start: 45037, Stop: 44528, Start Num: 25

Candidate Starts for LarryKay_79:

(Start: 19 @45073 has 3 MA's), (Start: 25 @45037 has 65 MA's), (28, 45001), (31, 44950), (36, 44875), (41, 44839), (44, 44791), (46, 44770), (49, 44710), (50, 44707), (51, 44704), (52, 44668), (56, 44605), (59, 44560),

Gene: Lemur_70 Start: 44168, Stop: 43656, Start Num: 22

Candidate Starts for Lemur_70:

(Start: 22 @44168 has 92 MA's), (28, 44120), (31, 44069), (36, 43994), (38, 43970), (39, 43964), (41, 43958), (44, 43907), (46, 43886), (50, 43829), (52, 43790), (59, 43688),

Gene: Lilbunny_77 Start: 43973, Stop: 43482, Start Num: 20

Candidate Starts for Lilbunny_77:

(12, 44009), (18, 43985), (Start: 20 @43973 has 1 MA's), (27, 43949), (31, 43886), (34, 43829), (44, 43727), (46, 43706), (50, 43643), (52, 43604), (61, 43493),

Gene: Lilith_77 Start: 44998, Stop: 44489, Start Num: 25

Candidate Starts for Lilith_77:

(Start: 19 @45034 has 3 MA's), (Start: 25 @44998 has 65 MA's), (28, 44962), (31, 44911), (32, 44902), (36, 44836), (41, 44800), (44, 44752), (46, 44731), (49, 44671), (50, 44668), (51, 44665), (52, 44629), (56, 44566), (59, 44521),

Gene: LittleB_70 Start: 44172, Stop: 43660, Start Num: 22

Candidate Starts for LittleB_70:

(Start: 22 @44172 has 92 MA's), (28, 44124), (31, 44073), (36, 43998), (38, 43974), (39, 43968), (41, 43962), (44, 43911), (46, 43890), (50, 43833), (52, 43794), (59, 43692),

Gene: LittleGuy_70 Start: 44067, Stop: 43555, Start Num: 22

Candidate Starts for LittleGuy_70:

(Start: 22 @44067 has 92 MA's), (28, 44019), (31, 43968), (36, 43893), (38, 43869), (39, 43863), (41, 43857), (44, 43806), (46, 43785), (50, 43728), (52, 43689), (55, 43635), (59, 43587),

Gene: Iowa_76 Start: 44997, Stop: 44488, Start Num: 25

Candidate Starts for Iowa_76:

(Start: 19 @45033 has 3 MA's), (Start: 25 @44997 has 65 MA's), (28, 44961), (31, 44910), (32, 44901), (36, 44835), (41, 44799), (44, 44751), (46, 44730), (49, 44670), (50, 44667), (51, 44664), (52, 44628), (56, 44565), (59, 44520),

Gene: LugYA_82 Start: 45009, Stop: 44500, Start Num: 25

Candidate Starts for LugYA_82:

(Start: 25 @45009 has 65 MA's), (28, 44973), (31, 44922), (32, 44913), (36, 44847), (41, 44811), (44, 44763), (46, 44742), (49, 44682), (50, 44679), (51, 44676), (52, 44640), (56, 44577), (59, 44532),

Gene: Lunsford_70 Start: 44165, Stop: 43653, Start Num: 22

Candidate Starts for Lunsford_70:

(Start: 22 @44165 has 92 MA's), (28, 44117), (31, 44066), (36, 43991), (38, 43967), (39, 43961), (41, 43955), (44, 43904), (46, 43883), (52, 43787), (59, 43685),

Gene: MA5_73 Start: 44223, Stop: 43606, Start Num: 5

Candidate Starts for MA5_73:

(Start: 5 @44223 has 1 MA's), (9, 44145), (11, 44130), (21, 44088), (Start: 22 @44079 has 92 MA's), (31, 43980), (36, 43905), (53, 43683),

Gene: MadMarie_77 Start: 45006, Stop: 44497, Start Num: 25

Candidate Starts for MadMarie_77:

(Start: 19 @45042 has 3 MA's), (Start: 25 @45006 has 65 MA's), (28, 44970), (31, 44919), (32, 44910), (36, 44844), (41, 44808), (44, 44760), (46, 44739), (49, 44679), (50, 44676), (51, 44673), (52, 44637), (56, 44574), (59, 44529),

Gene: Magnito_74 Start: 45855, Stop: 45169, Start Num: 4

Candidate Starts for Magnito_74:

(Start: 4 @45855 has 27 MA's), (8, 45822), (14, 45738), (Start: 23 @45681 has 2 MA's), (28, 45639), (31, 45588), (32, 45579), (34, 45531), (46, 45408), (48, 45366), (64, 45180),

Gene: Mainiac_78 Start: 45034, Stop: 44489, Start Num: 19

Candidate Starts for Mainiac_78:

(Start: 19 @45034 has 3 MA's), (Start: 25 @44998 has 65 MA's), (28, 44962), (31, 44911), (32, 44902), (36, 44836), (41, 44800), (44, 44752), (46, 44731), (49, 44671), (50, 44668), (51, 44665), (52, 44629), (56, 44566), (59, 44521),

Gene: Makemake_78 Start: 47465, Stop: 46779, Start Num: 4

Candidate Starts for Makemake_78:

(Start: 4 @47465 has 27 MA's), (8, 47432), (14, 47348), (Start: 23 @47291 has 2 MA's), (28, 47249), (31, 47198), (32, 47189), (34, 47141), (46, 47018), (48, 46976), (64, 46790),

Gene: Malinsilva_81 Start: 44997, Stop: 44488, Start Num: 25

Candidate Starts for Malinsilva_81:

(Start: 19 @45033 has 3 MA's), (Start: 25 @44997 has 65 MA's), (28, 44961), (31, 44910), (32, 44901), (36, 44835), (41, 44799), (44, 44751), (46, 44730), (49, 44670), (50, 44667), (51, 44664), (52, 44628), (56, 44565), (59, 44520),

Gene: Manatee_73 Start: 45395, Stop: 44709, Start Num: 4

Candidate Starts for Manatee_73:

(Start: 4 @45395 has 27 MA's), (8, 45362), (14, 45278), (Start: 23 @45221 has 2 MA's), (28, 45179), (31, 45128), (32, 45119), (34, 45071), (46, 44948), (48, 44906), (64, 44720),

Gene: MarQuardt_79 Start: 45007, Stop: 44498, Start Num: 25

Candidate Starts for MarQuardt_79:

(Start: 25 @45007 has 65 MA's), (28, 44971), (31, 44920), (32, 44911), (36, 44845), (41, 44809), (44, 44761), (46, 44740), (49, 44680), (50, 44677), (51, 44674), (52, 44638), (56, 44575), (59, 44530),

Gene: Margo_73 Start: 44673, Stop: 44164, Start Num: 22

Candidate Starts for Margo_73:

(Start: 22 @44673 has 92 MA's), (30, 44616), (31, 44577), (32, 44568), (35, 44505), (36, 44502), (39, 44472), (42, 44454), (44, 44415), (46, 44394), (52, 44298), (56, 44241), (59, 44196),

Gene: Marie_77 Start: 45008, Stop: 44499, Start Num: 25

Candidate Starts for Marie_77:

(Start: 25 @45008 has 65 MA's), (28, 44972), (31, 44921), (32, 44912), (36, 44846), (41, 44810), (44, 44762), (46, 44741), (49, 44681), (50, 44678), (51, 44675), (52, 44639), (56, 44576), (59, 44531),

Gene: Maroc7_77 Start: 48458, Stop: 47772, Start Num: 4

Candidate Starts for Maroc7_77:

(Start: 4 @48458 has 27 MA's), (8, 48425), (14, 48341), (Start: 23 @48284 has 2 MA's), (28, 48242), (31, 48191), (32, 48182), (34, 48134), (38, 48092), (46, 48011), (48, 47969), (64, 47783),

Gene: Medusa_70 Start: 44185, Stop: 43673, Start Num: 22

Candidate Starts for Medusa_70:

(Start: 22 @44185 has 92 MA's), (28, 44137), (31, 44086), (36, 44011), (38, 43987), (39, 43981), (41, 43975), (44, 43924), (46, 43903), (52, 43807), (59, 43705),

Gene: Melvin_72 Start: 44166, Stop: 43654, Start Num: 22

Candidate Starts for Melvin_72:

(Start: 22 @44166 has 92 MA's), (28, 44118), (31, 44067), (36, 43992), (38, 43968), (39, 43962), (41, 43956), (44, 43905), (46, 43884), (50, 43827), (52, 43788), (59, 43686),

Gene: Methuselah_72 Start: 45029, Stop: 44520, Start Num: 25

Candidate Starts for Methuselah_72:

(Start: 25 @45029 has 65 MA's), (28, 44993), (31, 44942), (32, 44933), (36, 44867), (41, 44831), (44, 44783), (46, 44762), (49, 44702), (50, 44699), (51, 44696), (52, 44660), (56, 44597), (59, 44552),

Gene: Microwolf_75 Start: 45021, Stop: 44512, Start Num: 25

Candidate Starts for Microwolf_75:

(Start: 19 @45057 has 3 MA's), (Start: 25 @45021 has 65 MA's), (28, 44985), (31, 44934), (32, 44925), (36, 44859), (41, 44823), (44, 44775), (46, 44754), (49, 44694), (50, 44691), (51, 44688), (52, 44652), (56, 44589), (59, 44544),

Gene: Millski_69 Start: 44172, Stop: 43660, Start Num: 22

Candidate Starts for Millski_69:

(Start: 22 @44172 has 92 MA's), (28, 44124), (31, 44073), (36, 43998), (38, 43974), (39, 43968), (41, 43962), (44, 43911), (46, 43890), (50, 43833), (52, 43794), (59, 43692),

Gene: Miramae_69 Start: 43907, Stop: 43407, Start Num: 24

Candidate Starts for Miramae_69:

(Start: 24 @43907 has 20 MA's), (31, 43820), (33, 43796), (34, 43763), (39, 43715), (41, 43709), (42, 43697), (44, 43658), (46, 43637), (52, 43541), (59, 43439),

Gene: MoneyMay_78 Start: 45008, Stop: 44499, Start Num: 25

Candidate Starts for MoneyMay_78:

(Start: 25 @45008 has 65 MA's), (28, 44972), (31, 44921), (32, 44912), (36, 44846), (41, 44810), (44, 44762), (46, 44741), (49, 44681), (50, 44678), (51, 44675), (52, 44639), (56, 44576), (59, 44531),

Gene: Montavir_74 Start: 45005, Stop: 44496, Start Num: 25

Candidate Starts for Montavir_74:

(Start: 25 @45005 has 65 MA's), (28, 44969), (31, 44918), (32, 44909), (36, 44843), (41, 44807), (44, 44759), (46, 44738), (49, 44678), (50, 44675), (51, 44672), (52, 44636), (56, 44573), (59, 44528),

Gene: Morpher26_69 Start: 44373, Stop: 43873, Start Num: 24

Candidate Starts for Morpher26_69:

(Start: 24 @44373 has 20 MA's), (31, 44286), (33, 44262), (39, 44181), (41, 44175), (42, 44163), (44, 44124), (45, 44109), (46, 44103), (52, 44007), (57, 43941), (59, 43905),

Gene: MuchMore_82 Start: 44994, Stop: 44485, Start Num: 25

Candidate Starts for MuchMore_82:

(Start: 19 @45030 has 3 MA's), (Start: 25 @44994 has 65 MA's), (28, 44958), (31, 44907), (32, 44898), (36, 44832), (41, 44796), (44, 44748), (46, 44727), (49, 44667), (50, 44664), (51, 44661), (52, 44625), (56, 44562), (59, 44517),

Gene: Mundrea_69 Start: 44369, Stop: 43869, Start Num: 24

Candidate Starts for Mundrea_69:

(Start: 24 @44369 has 20 MA's), (30, 44321), (31, 44282), (34, 44225), (39, 44177), (41, 44171), (42, 44159), (44, 44120), (46, 44099), (52, 44003), (57, 43937), (59, 43901),

Gene: Museum_75 Start: 47134, Stop: 46448, Start Num: 4

Candidate Starts for Museum_75:

(Start: 4 @47134 has 27 MA's), (8, 47101), (14, 47017), (Start: 23 @46960 has 2 MA's), (28, 46918), (31, 46867), (32, 46858), (34, 46810), (46, 46687), (48, 46645), (64, 46459),

Gene: MyraDee_73 Start: 42375, Stop: 41872, Start Num: 25

Candidate Starts for MyraDee_73:

(Start: 25 @42375 has 65 MA's), (31, 42288), (43, 42150), (44, 42129), (45, 42114), (46, 42108), (57, 41940),

Gene: NearlyHeadless_85 Start: 45887, Stop: 45384, Start Num: 25

Candidate Starts for NearlyHeadless_85:

(Start: 17 @45926 has 4 MA's), (Start: 25 @45887 has 65 MA's), (27, 45863), (30, 45839), (31, 45800), (35, 45728), (37, 45722), (38, 45701), (41, 45689), (46, 45620), (52, 45518), (58, 45434), (59, 45416), (62, 45404),

Gene: Noelle_70 Start: 44689, Stop: 44189, Start Num: 24

Candidate Starts for Noelle_70:

(Start: 24 @44689 has 20 MA's), (31, 44602), (34, 44545), (41, 44491), (42, 44479), (44, 44440), (46, 44419), (47, 44404), (59, 44221),

Gene: Norbert_69 Start: 44646, Stop: 44137, Start Num: 22

Candidate Starts for Norbert_69:

(Start: 22 @44646 has 92 MA's), (30, 44589), (31, 44550), (32, 44541), (35, 44478), (36, 44475), (39, 44445), (42, 44427), (44, 44388), (46, 44367), (52, 44271), (56, 44214), (59, 44169),

Gene: NorthStar_68 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for NorthStar_68:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (50, 43832), (52, 43793), (59, 43691),

Gene: Northrop_67 Start: 44167, Stop: 43655, Start Num: 22

Candidate Starts for Northrop_67:

(Start: 22 @44167 has 92 MA's), (28, 44119), (31, 44068), (36, 43993), (38, 43969), (39, 43963), (41, 43957), (44, 43906), (46, 43885), (50, 43828), (52, 43789), (59, 43687),

Gene: Norz_71 Start: 47607, Stop: 46921, Start Num: 4

Candidate Starts for Norz_71:

(Start: 4 @47607 has 27 MA's), (8, 47574), (14, 47490), (Start: 23 @47433 has 2 MA's), (28, 47391), (31, 47340), (32, 47331), (34, 47283), (46, 47160), (48, 47118), (64, 46932),

Gene: Nyxis_69 Start: 44061, Stop: 43549, Start Num: 22

Candidate Starts for Nyxis_69:

(Start: 22 @44061 has 92 MA's), (28, 44013), (31, 43962), (36, 43887), (38, 43863), (39, 43857), (41, 43851), (44, 43800), (46, 43779), (50, 43722), (52, 43683), (55, 43629), (59, 43581),

Gene: OKaNui_69 Start: 44221, Stop: 43709, Start Num: 22

Candidate Starts for OKaNui_69:

(Start: 22 @44221 has 92 MA's), (28, 44173), (31, 44122), (36, 44047), (38, 44023), (39, 44017), (41, 44011), (44, 43960), (46, 43939), (50, 43882), (52, 43843), (59, 43741),

Gene: Obama12_71 Start: 44591, Stop: 44079, Start Num: 22

Candidate Starts for Obama12_71:

(Start: 22 @44591 has 92 MA's), (28, 44543), (31, 44492), (36, 44417), (38, 44393), (41, 44381), (44, 44330), (46, 44309), (50, 44252), (59, 44111),

Gene: Ollie_79 Start: 44876, Stop: 44367, Start Num: 25

Candidate Starts for Ollie_79:

(Start: 25 @44876 has 65 MA's), (28, 44840), (31, 44789), (32, 44780), (36, 44714), (41, 44678), (44, 44630), (46, 44609), (49, 44549), (50, 44546), (51, 44543), (52, 44507), (56, 44444), (59, 44399),

Gene: P28Green_79 Start: 45011, Stop: 44502, Start Num: 25

Candidate Starts for P28Green_79:

(Start: 25 @45011 has 65 MA's), (28, 44975), (31, 44924), (32, 44915), (36, 44849), (41, 44813), (44, 44765), (46, 44744), (49, 44684), (50, 44681), (51, 44678), (52, 44642), (56, 44579), (59, 44534),

Gene: PGHhamlin_81 Start: 44997, Stop: 44488, Start Num: 25

Candidate Starts for PGHhamlin_81:

(Start: 19 @45033 has 3 MA's), (Start: 25 @44997 has 65 MA's), (28, 44961), (31, 44910), (32, 44901), (36, 44835), (41, 44799), (44, 44751), (46, 44730), (49, 44670), (50, 44667), (51, 44664), (52, 44628), (56, 44565), (59, 44520),

Gene: PSullivan_73 Start: 45043, Stop: 44507, Start Num: 23

Candidate Starts for PSullivan_73:

(Start: 4 @45217 has 27 MA's), (8, 45184), (14, 45100), (Start: 23 @45043 has 2 MA's), (28, 45001), (31, 44950), (32, 44941), (34, 44893), (44, 44791), (46, 44770), (48, 44728), (53, 44650),

Gene: PacerPaul_80 Start: 48480, Stop: 47794, Start Num: 4

Candidate Starts for PacerPaul_80:

(Start: 4 @48480 has 27 MA's), (8, 48447), (14, 48363), (Start: 23 @48306 has 2 MA's), (28, 48264), (31, 48213), (32, 48204), (34, 48156), (46, 48033), (48, 47991), (64, 47805),

Gene: Panamaxus_71 Start: 44648, Stop: 44139, Start Num: 22

Candidate Starts for Panamaxus_71:

(Start: 22 @44648 has 92 MA's), (30, 44591), (31, 44552), (32, 44543), (35, 44480), (36, 44477), (39, 44447), (42, 44429), (44, 44390), (46, 44369), (52, 44273), (56, 44216), (59, 44171),

Gene: Peaches_68 Start: 44170, Stop: 43658, Start Num: 22

Candidate Starts for Peaches_68:

(Start: 22 @44170 has 92 MA's), (28, 44122), (31, 44071), (36, 43996), (38, 43972), (39, 43966), (41, 43960), (44, 43909), (46, 43888), (50, 43831), (52, 43792), (59, 43690),

Gene: Pembroke_79 Start: 45006, Stop: 44497, Start Num: 25

Candidate Starts for Pembroke_79:

(Start: 19 @45042 has 3 MA's), (Start: 25 @45006 has 65 MA's), (28, 44970), (31, 44919), (32, 44910), (36, 44844), (41, 44808), (44, 44760), (46, 44739), (49, 44679), (50, 44676), (51, 44673), (52, 44637), (56, 44574), (59, 44529),

Gene: Penny1_79 Start: 45009, Stop: 44500, Start Num: 25

Candidate Starts for Penny1_79:

(Start: 25 @45009 has 65 MA's), (28, 44973), (31, 44922), (32, 44913), (36, 44847), (41, 44811), (44, 44763), (46, 44742), (49, 44682), (50, 44679), (51, 44676), (52, 44640), (56, 44577), (59, 44532),

Gene: Perplexer_69 Start: 44349, Stop: 43849, Start Num: 24

Candidate Starts for Perplexer_69:

(Start: 24 @44349 has 20 MA's), (31, 44262), (33, 44238), (39, 44157), (41, 44151), (42, 44139), (44, 44100), (45, 44085), (46, 44079), (52, 43983), (57, 43917), (59, 43881),

Gene: Peterson_74 Start: 47439, Stop: 46753, Start Num: 4

Candidate Starts for Peterson_74:

(Start: 4 @47439 has 27 MA's), (8, 47406), (14, 47322), (Start: 23 @47265 has 2 MA's), (28, 47223), (31, 47172), (32, 47163), (34, 47115), (46, 46992), (48, 46950), (64, 46764),

Gene: PetiteSangsue_69 Start: 44352, Stop: 43852, Start Num: 24

Candidate Starts for PetiteSangsue_69:

(Start: 24 @44352 has 20 MA's), (31, 44265), (33, 44241), (39, 44160), (41, 44154), (42, 44142), (44, 44103), (45, 44088), (46, 44082), (52, 43986), (57, 43920), (59, 43884),

Gene: Petruchio_75 Start: 45700, Stop: 45014, Start Num: 4

Candidate Starts for Petruchio_75:

(Start: 4 @45700 has 27 MA's), (8, 45667), (14, 45583), (Start: 23 @45526 has 2 MA's), (28, 45484), (31, 45433), (32, 45424), (34, 45376), (38, 45334), (46, 45253), (48, 45211), (64, 45025),

Gene: Phantastic_75 Start: 44335, Stop: 43802, Start Num: 22

Candidate Starts for Phantastic_75:

(21, 44344), (Start: 22 @44335 has 92 MA's), (31, 44236), (36, 44161), (39, 44131), (42, 44113), (44, 44074), (46, 44053), (52, 43957), (60, 43849), (65, 43825),

Gene: Phillis_81 Start: 44943, Stop: 44401, Start Num: 17

Candidate Starts for Phillis_81:

(Start: 17 @44943 has 4 MA's), (Start: 25 @44904 has 65 MA's), (27, 44880), (31, 44817), (35, 44745), (36, 44742), (37, 44739), (38, 44718), (40, 44709), (46, 44637), (52, 44535), (57, 44469), (59, 44433), (62, 44421),

Gene: Phoebe_80 Start: 45001, Stop: 44492, Start Num: 25

Candidate Starts for Phoebe_80:

(Start: 25 @45001 has 65 MA's), (28, 44965), (31, 44914), (32, 44905), (36, 44839), (41, 44803), (44, 44755), (46, 44734), (49, 44674), (50, 44671), (51, 44668), (52, 44632), (56, 44569), (59, 44524),

Gene: Phontbonne_70 Start: 44077, Stop: 43565, Start Num: 22

Candidate Starts for Phontbonne_70:

(Start: 22 @44077 has 92 MA's), (28, 44029), (31, 43978), (36, 43903), (38, 43879), (39, 43873), (41, 43867), (44, 43816), (46, 43795), (50, 43738), (52, 43699), (55, 43645), (59, 43597),

Gene: Phoxy_79 Start: 45030, Stop: 44521, Start Num: 25

Candidate Starts for Phoxy_79:

(Start: 25 @45030 has 65 MA's), (28, 44994), (31, 44943), (32, 44934), (36, 44868), (41, 44832), (44, 44784), (46, 44763), (49, 44703), (50, 44700), (51, 44697), (52, 44661), (56, 44598), (59, 44553),

Gene: PhrostyMug_77 Start: 48272, Stop: 47586, Start Num: 4

Candidate Starts for PhrostyMug_77:

(2, 48494), (Start: 4 @48272 has 27 MA's), (8, 48239), (14, 48155), (Start: 23 @48098 has 2 MA's), (28, 48056), (31, 48005), (32, 47996), (34, 47948), (46, 47825), (48, 47783), (64, 47597),

Gene: Pipcraft_67 Start: 44172, Stop: 43660, Start Num: 22

Candidate Starts for Pipcraft_67:

(Start: 22 @44172 has 92 MA's), (28, 44124), (31, 44073), (36, 43998), (38, 43974), (39, 43968), (41, 43962), (44, 43911), (46, 43890), (50, 43833), (52, 43794), (59, 43692),

Gene: Pocahontas_72 Start: 44643, Stop: 44134, Start Num: 22

Candidate Starts for Pocahontas_72:

(Start: 22 @44643 has 92 MA's), (30, 44586), (31, 44547), (32, 44538), (35, 44475), (36, 44472), (39, 44442), (42, 44424), (44, 44385), (46, 44364), (52, 44268), (56, 44211), (59, 44166),

Gene: Popcicle_73 Start: 44643, Stop: 44134, Start Num: 22

Candidate Starts for Popcicle_73:

(Start: 22 @44643 has 92 MA's), (30, 44586), (31, 44547), (32, 44538), (35, 44475), (36, 44472), (39, 44442), (42, 44424), (44, 44385), (46, 44364), (52, 44268), (56, 44211), (59, 44166),

Gene: PotatoSplit_80 Start: 45009, Stop: 44500, Start Num: 25

Candidate Starts for PotatoSplit_80:

(Start: 25 @45009 has 65 MA's), (28, 44973), (31, 44922), (32, 44913), (36, 44847), (41, 44811), (44, 44763), (46, 44742), (49, 44682), (50, 44679), (51, 44676), (52, 44640), (56, 44577), (59, 44532),

Gene: Pumbaa_70 Start: 44116, Stop: 43604, Start Num: 22

Candidate Starts for Pumbaa_70:

(Start: 22 @44116 has 92 MA's), (28, 44068), (31, 44017), (36, 43942), (38, 43918), (39, 43912), (41, 43906), (44, 43855), (46, 43834), (50, 43777), (52, 43738), (59, 43636),

Gene: QuinnKiro_72 Start: 44647, Stop: 44138, Start Num: 22

Candidate Starts for QuinnKiro_72:

(Start: 22 @44647 has 92 MA's), (30, 44590), (31, 44551), (32, 44542), (35, 44479), (36, 44476), (39, 44446), (42, 44428), (44, 44389), (46, 44368), (52, 44272), (56, 44215), (59, 44170),

Gene: Relief_69 Start: 44168, Stop: 43656, Start Num: 22

Candidate Starts for Relief_69:

(Start: 22 @44168 has 92 MA's), (28, 44120), (31, 44069), (36, 43994), (38, 43970), (39, 43964), (41, 43958), (44, 43907), (46, 43886), (50, 43829), (52, 43790), (59, 43688),

Gene: Roary_86 Start: 46114, Stop: 45572, Start Num: 17

Candidate Starts for Roary_86:

(Start: 17 @46114 has 4 MA's), (Start: 25 @46075 has 65 MA's), (27, 46051), (30, 46027), (31, 45988), (35, 45916), (37, 45910), (38, 45889), (41, 45877), (46, 45808), (52, 45706), (58, 45622), (59, 45604), (62, 45592),

Gene: RockieBear_67 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for RockieBear_67:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (52, 43793), (59, 43691),

Gene: Rocksand_67 Start: 44167, Stop: 43655, Start Num: 22

Candidate Starts for Rocksand_67:

(Start: 22 @44167 has 92 MA's), (28, 44119), (31, 44068), (36, 43993), (38, 43969), (39, 43963), (41, 43957), (44, 43906), (46, 43885), (50, 43828), (52, 43789), (59, 43687),

Gene: Rockstar_72 Start: 44129, Stop: 43650, Start Num: 26

Candidate Starts for Rockstar_72:

(Start: 26 @44129 has 1 MA's), (29, 44111), (31, 44063), (36, 43988), (39, 43958), (42, 43940), (44, 43901), (46, 43880), (52, 43784), (56, 43727), (59, 43682),

Gene: Romney_69 Start: 44168, Stop: 43656, Start Num: 22

Candidate Starts for Romney_69:

(Start: 22 @44168 has 92 MA's), (28, 44120), (31, 44069), (36, 43994), (38, 43970), (39, 43964), (41, 43958), (44, 43907), (46, 43886), (50, 43829), (52, 43790), (59, 43688),

Gene: Roosevelt_68 Start: 44173, Stop: 43661, Start Num: 22

Candidate Starts for Roosevelt_68:

(Start: 22 @44173 has 92 MA's), (28, 44125), (31, 44074), (36, 43999), (38, 43975), (39, 43969), (41, 43963), (44, 43912), (46, 43891), (50, 43834), (52, 43795), (55, 43741), (59, 43693),

Gene: Ruin_70 Start: 44164, Stop: 43652, Start Num: 22

Candidate Starts for Ruin_70:

(Start: 22 @44164 has 92 MA's), (28, 44116), (31, 44065), (36, 43990), (38, 43966), (39, 43960), (41, 43954), (44, 43903), (46, 43882), (50, 43825), (52, 43786), (59, 43684),

Gene: Rummer_78 Start: 45033, Stop: 44524, Start Num: 25

Candidate Starts for Rummer_78:

(Start: 25 @45033 has 65 MA's), (28, 44997), (31, 44946), (32, 44937), (36, 44871), (41, 44835), (44, 44787), (46, 44766), (49, 44706), (50, 44703), (51, 44700), (52, 44664), (56, 44601), (59, 44556),

Gene: Sabertooth_70 Start: 44174, Stop: 43662, Start Num: 22

Candidate Starts for Sabertooth_70:

(Start: 22 @44174 has 92 MA's), (28, 44126), (31, 44075), (36, 44000), (38, 43976), (39, 43970), (41, 43964), (44, 43913), (46, 43892), (50, 43835), (52, 43796), (59, 43694),

Gene: Sabia_77 Start: 45049, Stop: 44504, Start Num: 19

Candidate Starts for Sabia_77:

(Start: 19 @45049 has 3 MA's), (Start: 25 @45013 has 65 MA's), (28, 44977), (31, 44926), (32, 44917), (36, 44851), (41, 44815), (44, 44767), (46, 44746), (49, 44686), (50, 44683), (51, 44680), (52, 44644), (56, 44581), (59, 44536),

Gene: Sabinator_77 Start: 45007, Stop: 44498, Start Num: 25

Candidate Starts for Sabinator_77:

(Start: 25 @45007 has 65 MA's), (28, 44971), (31, 44920), (32, 44911), (36, 44845), (41, 44809), (44, 44761), (46, 44740), (49, 44680), (50, 44677), (51, 44674), (52, 44638), (56, 44575), (59, 44530),

Gene: Saintus_80 Start: 42723, Stop: 42220, Start Num: 25

Candidate Starts for Saintus_80:

(Start: 17 @42762 has 4 MA's), (Start: 25 @42723 has 65 MA's), (27, 42699), (30, 42675), (31, 42636), (35, 42564), (37, 42558), (38, 42537), (41, 42525), (46, 42456), (52, 42354), (58, 42270), (59, 42252), (62, 42240),

Gene: SarFire_79 Start: 48509, Stop: 47823, Start Num: 4

Candidate Starts for SarFire_79:

(Start: 4 @48509 has 27 MA's), (6, 48491), (8, 48476), (Start: 23 @48335 has 2 MA's), (28, 48293), (31, 48242), (32, 48233), (34, 48185), (46, 48062), (48, 48020), (64, 47834),

Gene: SenorClean_71 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for SenorClean_71:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (50, 43832), (52, 43793), (59, 43691),

Gene: Shaka_68 Start: 44168, Stop: 43656, Start Num: 22

Candidate Starts for Shaka_68:

(Start: 22 @44168 has 92 MA's), (28, 44120), (31, 44069), (36, 43994), (38, 43970), (41, 43958), (44, 43907), (46, 43886), (50, 43829), (59, 43688),

Gene: SheldonCooper_70 Start: 44608, Stop: 44096, Start Num: 22

Candidate Starts for SheldonCooper_70:

(Start: 22 @44608 has 92 MA's), (28, 44560), (31, 44509), (36, 44434), (38, 44410), (41, 44398), (44, 44347), (46, 44326), (50, 44269), (59, 44128),

Gene: Shep_71 Start: 43612, Stop: 43100, Start Num: 22

Candidate Starts for Shep_71:

(21, 43621), (Start: 22 @43612 has 92 MA's), (Start: 23 @43606 has 2 MA's), (31, 43513), (36, 43438), (37, 43435), (38, 43414), (42, 43390), (44, 43351), (45, 43336), (46, 43330), (52, 43234), (56, 43177), (59, 43132),

Gene: Shygu2_69 Start: 44403, Stop: 43903, Start Num: 24

Candidate Starts for Shygu2_69:

(Start: 24 @44403 has 20 MA's), (31, 44316), (33, 44292), (39, 44211), (41, 44205), (42, 44193), (44, 44154), (45, 44139), (46, 44133), (52, 44037), (57, 43971), (59, 43935),

Gene: SkiPole_84 Start: 47837, Stop: 47151, Start Num: 4

Candidate Starts for SkiPole_84:

(Start: 4 @47837 has 27 MA's), (8, 47804), (14, 47720), (Start: 23 @47663 has 2 MA's), (28, 47621), (31, 47570), (32, 47561), (34, 47513), (46, 47390), (48, 47348), (64, 47162),

Gene: Skipitt_69 Start: 44165, Stop: 43653, Start Num: 22

Candidate Starts for Skipitt_69:

(Start: 22 @44165 has 92 MA's), (28, 44117), (31, 44066), (36, 43991), (38, 43967), (39, 43961), (41, 43955), (44, 43904), (46, 43883), (50, 43826), (52, 43787), (59, 43685),

Gene: Smairt_79 Start: 49288, Stop: 48602, Start Num: 4

Candidate Starts for Smairt_79:

(2, 49510), (Start: 4 @49288 has 27 MA's), (8, 49255), (14, 49171), (Start: 23 @49114 has 2 MA's), (28, 49072), (31, 49021), (32, 49012), (34, 48964), (46, 48841), (48, 48799), (64, 48613),

Gene: Smeadley_84 Start: 45939, Stop: 45436, Start Num: 25

Candidate Starts for Smeadley_84:

(Start: 17 @45978 has 4 MA's), (Start: 25 @45939 has 65 MA's), (27, 45915), (30, 45891), (31, 45852), (35, 45780), (37, 45774), (38, 45753), (41, 45741), (46, 45672), (52, 45570), (58, 45486), (59, 45468), (62, 45456),

Gene: Snickers_79 Start: 44978, Stop: 44469, Start Num: 25

Candidate Starts for Snickers_79:

(Start: 25 @44978 has 65 MA's), (28, 44942), (31, 44891), (32, 44882), (36, 44816), (41, 44780), (44, 44732), (46, 44711), (49, 44651), (50, 44648), (51, 44645), (52, 44609), (56, 44546), (59, 44501),

Gene: SoYo_76 Start: 44920, Stop: 44411, Start Num: 25

Candidate Starts for SoYo_76:

(Start: 25 @44920 has 65 MA's), (28, 44884), (31, 44833), (32, 44824), (36, 44758), (41, 44722), (44, 44674), (46, 44653), (49, 44593), (50, 44590), (51, 44587), (52, 44551), (56, 44488), (59, 44443),

Gene: Soshari_81 Start: 45029, Stop: 44520, Start Num: 25

Candidate Starts for Soshari_81:

(Start: 25 @45029 has 65 MA's), (28, 44993), (31, 44942), (32, 44933), (36, 44867), (41, 44831), (44, 44783), (46, 44762), (49, 44702), (50, 44699), (51, 44696), (52, 44660), (56, 44597), (59, 44552),

Gene: Sparxx_71 Start: 44167, Stop: 43655, Start Num: 22

Candidate Starts for Sparxx_71:

(Start: 22 @44167 has 92 MA's), (28, 44119), (31, 44068), (36, 43993), (38, 43969), (39, 43963), (41, 43957), (44, 43906), (46, 43885), (50, 43828), (52, 43789), (59, 43687),

Gene: Spike509_79 Start: 45030, Stop: 44521, Start Num: 25

Candidate Starts for Spike509_79:

(Start: 25 @45030 has 65 MA's), (28, 44994), (31, 44943), (32, 44934), (36, 44868), (41, 44832), (44, 44784), (46, 44763), (49, 44703), (50, 44700), (51, 44697), (52, 44661), (56, 44598), (59, 44553),

Gene: Stagni_76 Start: 45008, Stop: 44499, Start Num: 25

Candidate Starts for Stagni_76:

(Start: 19 @45044 has 3 MA's), (Start: 25 @45008 has 65 MA's), (28, 44972), (31, 44921), (32, 44912), (36, 44846), (41, 44810), (44, 44762), (46, 44741), (49, 44681), (50, 44678), (51, 44675), (52, 44639), (56, 44576), (59, 44531),

Gene: Stasia_69 Start: 44365, Stop: 43862, Start Num: 22

Candidate Starts for Stasia_69:

(13, 44416), (16, 44407), (Start: 22 @44365 has 92 MA's), (31, 44275), (33, 44251), (38, 44176), (42, 44152), (44, 44113), (46, 44092), (52, 43996), (54, 43960), (57, 43930), (59, 43894),

Gene: SteMason_70 Start: 44168, Stop: 43656, Start Num: 22

Candidate Starts for SteMason_70:

(Start: 22 @44168 has 92 MA's), (28, 44120), (31, 44069), (36, 43994), (38, 43970), (39, 43964), (41, 43958), (44, 43907), (46, 43886), (50, 43829), (52, 43790), (59, 43688),

Gene: StepMih_78 Start: 44999, Stop: 44490, Start Num: 25

Candidate Starts for StepMih_78:

(Start: 19 @45035 has 3 MA's), (Start: 25 @44999 has 65 MA's), (28, 44963), (31, 44912), (32, 44903), (36, 44837), (41, 44801), (44, 44753), (46, 44732), (49, 44672), (50, 44669), (51, 44666), (52, 44630), (56, 44567), (59, 44522),

Gene: Stephig9_83 Start: 45878, Stop: 45375, Start Num: 25

Candidate Starts for Stephig9_83:

(Start: 17 @45917 has 4 MA's), (Start: 25 @45878 has 65 MA's), (27, 45854), (30, 45830), (31, 45791), (35, 45719), (37, 45713), (38, 45692), (41, 45680), (46, 45611), (52, 45509), (58, 45425), (59, 45407), (62, 45395),

Gene: Stink_69 Start: 44187, Stop: 43687, Start Num: 24

Candidate Starts for Stink_69:

(Start: 24 @44187 has 20 MA's), (31, 44100), (33, 44076), (34, 44043), (39, 43995), (41, 43989), (42, 43977), (44, 43938), (46, 43917), (52, 43821), (59, 43719),

Gene: Switzer_74 Start: 46808, Stop: 46122, Start Num: 4

Candidate Starts for Switzer_74:

(Start: 4 @46808 has 27 MA's), (8, 46775), (14, 46691), (Start: 23 @46634 has 2 MA's), (28, 46592), (31, 46541), (32, 46532), (34, 46484), (46, 46361), (48, 46319), (64, 46133),

Gene: Taquarus_69 Start: 44174, Stop: 43662, Start Num: 22

Candidate Starts for Taquarus_69:

(Start: 22 @44174 has 92 MA's), (28, 44126), (31, 44075), (36, 44000), (38, 43976), (39, 43970), (41, 43964), (44, 43913), (46, 43892), (50, 43835), (52, 43796), (59, 43694),

Gene: Taurus_80 Start: 45008, Stop: 44499, Start Num: 25

Candidate Starts for Taurus_80:

(Start: 25 @45008 has 65 MA's), (28, 44972), (31, 44921), (32, 44912), (36, 44846), (41, 44810), (44, 44762), (46, 44741), (49, 44681), (50, 44678), (51, 44675), (52, 44639), (56, 44576), (59, 44531),

Gene: Texage_71 Start: 44648, Stop: 44139, Start Num: 22

Candidate Starts for Texage_71:

(Start: 22 @44648 has 92 MA's), (30, 44591), (31, 44552), (32, 44543), (35, 44480), (36, 44477), (39, 44447), (42, 44429), (44, 44390), (46, 44369), (52, 44273), (56, 44216), (59, 44171),

Gene: Thanksgivukkah_69 Start: 44169, Stop: 43657, Start Num: 22

Candidate Starts for Thanksgivukkah_69:

(Start: 22 @44169 has 92 MA's), (28, 44121), (31, 44070), (36, 43995), (38, 43971), (39, 43965), (41, 43959), (44, 43908), (46, 43887), (50, 43830), (52, 43791), (59, 43689),

Gene: Thor_79 Start: 47867, Stop: 47181, Start Num: 4

Candidate Starts for Thor_79:

(Start: 4 @47867 has 27 MA's), (6, 47849), (8, 47834), (Start: 23 @47693 has 2 MA's), (28, 47651), (31, 47600), (32, 47591), (34, 47543), (46, 47420), (48, 47378), (64, 47192),

Gene: Tiffany_78 Start: 44893, Stop: 44384, Start Num: 25

Candidate Starts for Tiffany_78:

(Start: 25 @44893 has 65 MA's), (28, 44857), (31, 44806), (32, 44797), (36, 44731), (41, 44695), (44, 44647), (46, 44626), (49, 44566), (50, 44563), (51, 44560), (52, 44524), (56, 44461), (59, 44416),

Gene: TinaFeyge_68 Start: 44166, Stop: 43654, Start Num: 22

Candidate Starts for TinaFeyge_68:

(Start: 22 @44166 has 92 MA's), (28, 44118), (31, 44067), (36, 43992), (38, 43968), (39, 43962), (41, 43956), (44, 43905), (46, 43884), (50, 43827), (52, 43788), (55, 43734), (59, 43686),

Gene: TinyPebbles_78 Start: 45035, Stop: 44526, Start Num: 25

Candidate Starts for TinyPebbles_78:

(Start: 19 @45071 has 3 MA's), (Start: 25 @45035 has 65 MA's), (28, 44999), (31, 44948), (36, 44873), (41, 44837), (44, 44789), (46, 44768), (49, 44708), (50, 44705), (51, 44702), (52, 44666), (56, 44603), (59, 44558),

Gene: TiroTheta9_69 Start: 44165, Stop: 43653, Start Num: 22

Candidate Starts for TiroTheta9_69:

(Start: 22 @44165 has 92 MA's), (28, 44117), (31, 44066), (36, 43991), (38, 43967), (39, 43961), (41, 43955), (44, 43904), (46, 43883), (50, 43826), (52, 43787), (55, 43733), (59, 43685),

Gene: Todacoro_73 Start: 44647, Stop: 44138, Start Num: 22

Candidate Starts for Todacoro_73:

(Start: 22 @44647 has 92 MA's), (30, 44590), (31, 44551), (32, 44542), (35, 44479), (36, 44476), (39, 44446), (42, 44428), (44, 44389), (46, 44368), (52, 44272), (56, 44215), (59, 44170),

Gene: Trouble_75 Start: 46975, Stop: 46289, Start Num: 4

Candidate Starts for Trouble_75:

(Start: 4 @46975 has 27 MA's), (8, 46942), (10, 46879), (14, 46858), (Start: 23 @46801 has 2 MA's), (28, 46759), (31, 46708), (32, 46699), (34, 46651), (46, 46528), (48, 46486), (64, 46300),

Gene: Turj99_71 Start: 46466, Stop: 45780, Start Num: 4

Candidate Starts for Turj99_71:

(Start: 4 @46466 has 27 MA's), (8, 46433), (14, 46349), (Start: 23 @46292 has 2 MA's), (28, 46250), (31, 46199), (32, 46190), (34, 46142), (46, 46019), (48, 45977), (64, 45791),

Gene: TygerBlood_70 Start: 44171, Stop: 43659, Start Num: 22

Candidate Starts for TygerBlood_70:

(Start: 22 @44171 has 92 MA's), (28, 44123), (31, 44072), (36, 43997), (38, 43973), (39, 43967), (41, 43961), (44, 43910), (46, 43889), (50, 43832), (52, 43793), (55, 43739), (59, 43691),

Gene: Vix_75 Start: 45088, Stop: 44579, Start Num: 25

Candidate Starts for Vix_75:

(Start: 25 @45088 has 65 MA's), (28, 45052), (31, 45001), (32, 44992), (36, 44926), (41, 44890), (44, 44842), (46, 44821), (49, 44761), (50, 44758), (51, 44755), (52, 44719), (56, 44656), (59, 44611),

Gene: Watson_78 Start: 44997, Stop: 44488, Start Num: 25

Candidate Starts for Watson_78:

(Start: 19 @45033 has 3 MA's), (Start: 25 @44997 has 65 MA's), (28, 44961), (31, 44910), (32, 44901), (36, 44835), (41, 44799), (44, 44751), (46, 44730), (49, 44670), (50, 44667), (51, 44664), (52, 44628), (56, 44565), (59, 44520),

Gene: Wilbur_70 Start: 44168, Stop: 43656, Start Num: 22

Candidate Starts for Wilbur_70:

(Start: 22 @44168 has 92 MA's), (28, 44120), (31, 44069), (36, 43994), (38, 43970), (39, 43964), (41, 43958), (44, 43907), (46, 43886), (50, 43829), (52, 43790), (59, 43688),

Gene: Wile_68 Start: 44382, Stop: 43882, Start Num: 24

Candidate Starts for Wile_68:

(Start: 24 @44382 has 20 MA's), (31, 44295), (33, 44271), (39, 44190), (41, 44184), (42, 44172), (44, 44133), (45, 44118), (46, 44112), (52, 44016), (57, 43950), (59, 43914),

Gene: Wizard007_69 Start: 44108, Stop: 43608, Start Num: 24

Candidate Starts for Wizard007_69:

(Start: 24 @44108 has 20 MA's), (31, 44021), (33, 43997), (39, 43916), (41, 43910), (42, 43898), (44, 43859), (45, 43844), (46, 43838), (52, 43742), (57, 43676), (59, 43640),

Gene: Wooldri_81 Start: 44914, Stop: 44405, Start Num: 25

Candidate Starts for Wooldri_81:

(Start: 25 @44914 has 65 MA's), (28, 44878), (31, 44827), (32, 44818), (36, 44752), (41, 44716), (44, 44668), (46, 44647), (49, 44587), (50, 44584), (51, 44581), (52, 44545), (56, 44482), (59, 44437),

Gene: Xena_68 Start: 44349, Stop: 43849, Start Num: 24

Candidate Starts for Xena_68:

(Start: 24 @44349 has 20 MA's), (31, 44262), (33, 44238), (39, 44157), (41, 44151), (42, 44139), (44, 44100), (45, 44085), (46, 44079), (52, 43983), (57, 43917), (59, 43881),

Gene: YoSam321_70 Start: 44166, Stop: 43654, Start Num: 22

Candidate Starts for YoSam321_70:

(Start: 22 @44166 has 92 MA's), (28, 44118), (31, 44067), (36, 43992), (38, 43968), (39, 43962), (41, 43956), (44, 43905), (46, 43884), (50, 43827), (52, 43788), (59, 43686),

Gene: Zarafa_71 Start: 44624, Stop: 44118, Start Num: 23

Candidate Starts for Zarafa_71:

(11, 44684), (Start: 22 @44630 has 92 MA's), (Start: 23 @44624 has 2 MA's), (31, 44531), (36, 44456), (37, 44453), (38, 44432), (42, 44408), (44, 44369), (45, 44354), (46, 44348), (52, 44252), (56, 44195), (59, 44150),