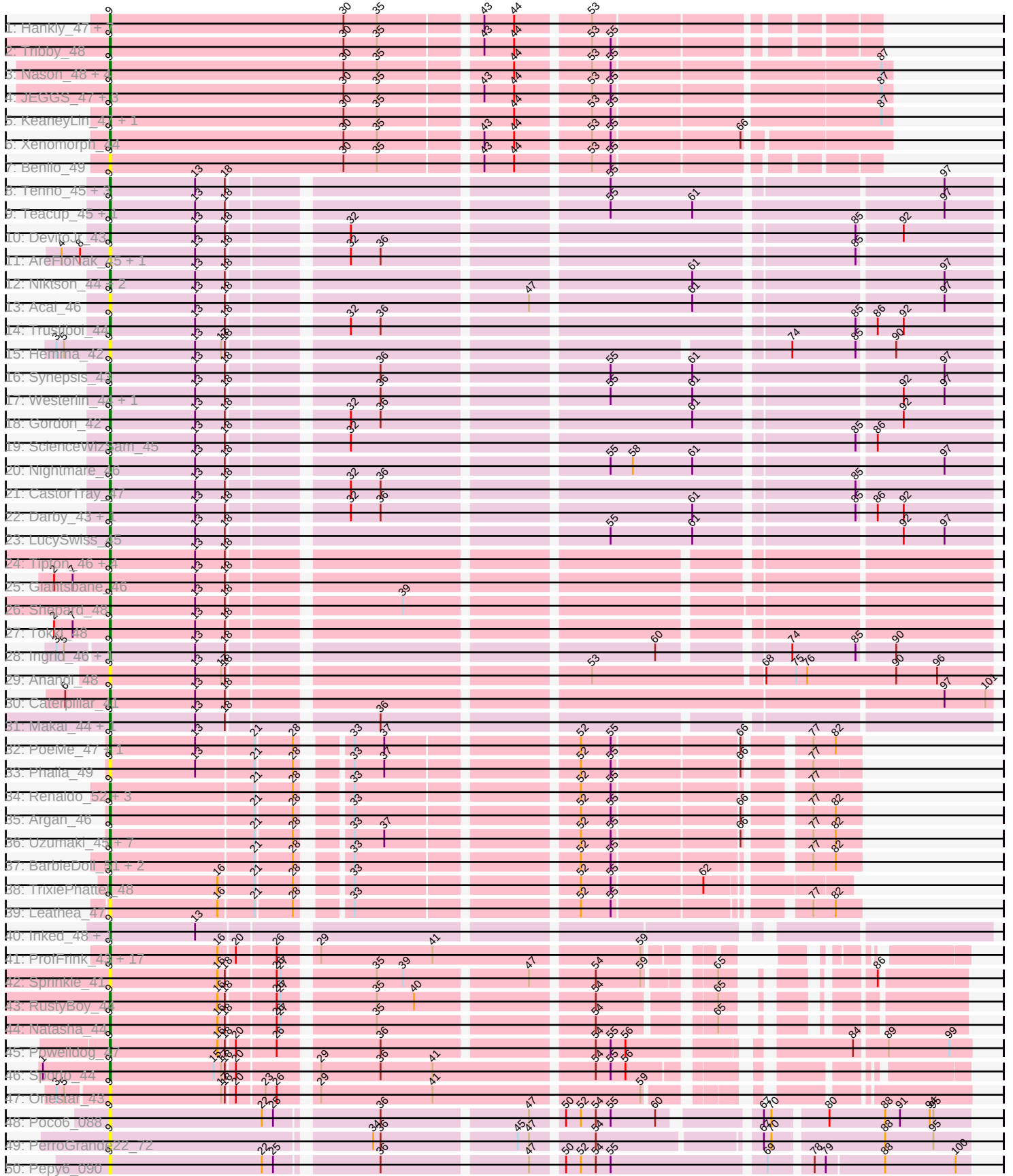
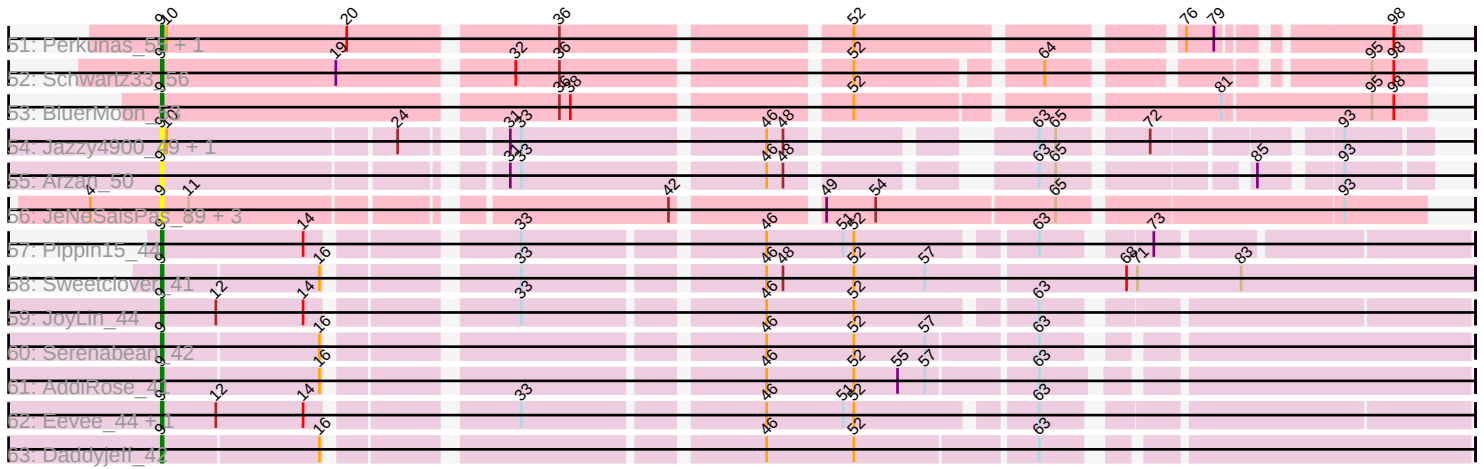


Pham 280198



Pham 280198



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 280198 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280198 has 130 members, 36 are drafts.

Phages represented in each track:

- Track 1 : Hankly_47, NapoleonB_48, BenitoAntonio_48, Cheesy_48, Bowling_48, Kardesai_49, Mooshroom_50, Dynamite_48
- Track 2 : Tribby_48
- Track 3 : Nason_48, YoshiYama_48, Arcadia_48, Elsa_48, Circum_50
- Track 4 : JEGGS_47, Correa_46, Mudcat_45, Heisenberger_47
- Track 5 : KeaneyLin_47, GoCrazy_47
- Track 6 : Xenomorph_44
- Track 7 : Benllo_49
- Track 8 : Tenno_45, CapnMurica_42, Dinallo_44, MiniBagel_44
- Track 9 : Teacup_45, Brunswick_45
- Track 10 : DevitoJr_43
- Track 11 : AreFloNak_45, Nivinsha_45
- Track 12 : Niktson_44, ElephantMan_44, Tatanka_43
- Track 13 : Acai_46
- Track 14 : Trustiboi_44
- Track 15 : Hemma_42
- Track 16 : Synopsis_43
- Track 17 : Westerlin_44, Issa_44
- Track 18 : Gordon_42
- Track 19 : ScienceWizSam_45
- Track 20 : Nightmare_46
- Track 21 : CastorTray_47
- Track 22 : Darby_43, Breylor17_45
- Track 23 : LucySwiss_45
- Track 24 : Tipton_46, Chlochlo_46, Bouchard_44, LilHuddy_46, Phaby_46
- Track 25 : Giantsbane_46
- Track 26 : Shepard_48
- Track 27 : Tokki_48
- Track 28 : Ingrid_46, Loretta_46
- Track 29 : Anandi_48
- Track 30 : Caterpillar_41
- Track 31 : Makai_44, Truckee_42
- Track 32 : PoeMe_47, Navi1117_49
- Track 33 : Phaila_49
- Track 34 : Renaldo_52, Muglass_49, Biscute_47, Barbonzobean_52
- Track 35 : Argan_46

- Track 36 : Uzumaki_45, Altjira_49, Zeina_48, GantcherGoblin_46, KevinMinion_47, Tenney120_48, Stardrop_51, Mardi_47
- Track 37 : BarbieDoll_51, Kinny_50, Lewando_49
- Track 38 : TrixiePhattel_48
- Track 39 : Leatheia_47
- Track 40 : Inked_48, Zippen_46
- Track 41 : ProfFrink_43, Stayer_43, Raunak_46, Sloopyjoe_43, Linda_43, Michelle_43, Djungelskog_43, Egad_43, Boog_42, BronxBay_43, Salk_43, StarLord_43, Jeremy4pt0_43, HerbBucket_43, Shiba_42, MrAaronian_43, DoctorPepper_42, Spain_46
- Track 42 : Sprinkle_41
- Track 43 : RustyBoy_44
- Track 44 : Natasha_44
- Track 45 : Powelldog_47
- Track 46 : Sporto_44
- Track 47 : Onestar_43
- Track 48 : Poco6_088
- Track 49 : PerroGrande22_72
- Track 50 : Pepy6_090
- Track 51 : Perkunas_55, Talon44_55
- Track 52 : Schwartz33_56
- Track 53 : BluerMoon_53
- Track 54 : Jazzy4900_49, Sunny4976_48
- Track 55 : Arzan_50
- Track 56 : JeNeSaisPas_89, Gandionco_91, Kureo_93, Marianna39_92
- Track 57 : Pippin15_44
- Track 58 : Sweetclover_41
- Track 59 : JoyLin_44
- Track 60 : Serenabean_42
- Track 61 : AddiRose_41
- Track 62 : Eevee_44, Yotsuba_44
- Track 63 : Daddyjeff_42

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

The start number called the most often in the published annotations is 9, it was called in 94 of the 94 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acai_46, AddiRose_41, Altjira_49, Anandi_48, Arcadia_48, AreFloNak_45, Argan_46, Arzan_50, BarbieDoll_51, Barbonzobean_52, BenitoAntonio_48, Benllo_49, Biscute_47, BluerMoon_53, Boog_42, Bouchard_44, Bowling_48, Breylor17_45, BronxBay_43, Brunswick_45, CapnMurica_42, CastorTray_47, Caterpillar_41, Cheesy_48, Chlocho_46, Circum_50, Correa_46, Daddyjeff_42, Darby_43, DevitoJr_43, Dinallo_44, Djungelskog_43, DoctorPepper_42, Dynamite_48, Eevee_44, Egad_43, ElephantMan_44, Elsa_48, Gandionco_91, GantcherGoblin_46, Giantsbane_46, GoCrazy_47, Gordon_42, Hankly_47, Heisenberger_47, Hemma_42, HerbBucket_43, Ingrid_46, Inked_48, Issa_44, JEGGS_47, Jazzy4900_49, JeNeSaisPas_89, Jeremy4pt0_43, JoyLin_44, Kardesai_49, KeaneyLin_47, KevinMinion_47, Kinny_50, Kureo_93, Leatheia_47,

Lewando_49, LilHuddy_46, Linda_43, Loretta_46, LucySwiss_45, Makai_44, Mardi_47, Marianna39_92, Michelle_43, MiniBagel_44, Mooshroom_50, MrAaronian_43, Mudcat_45, Muglass_49, NapoleonB_48, Nason_48, Natasha_44, Navi1117_49, Nightmare_46, Niktson_44, Nivinsha_45, Onestar_43, Pepy6_090, Perkunas_55, PerroGrande22_72, Phaby_46, Phaila_49, Pippin15_44, Poco6_088, PoeMe_47, Powelldog_47, ProfFrink_43, Raunak_46, Renaldo_52, RustyBoy_44, Salk_43, Schwartz33_56, ScienceWizSam_45, Serenabean_42, Shepard_48, Shiba_42, Sloopyjoe_43, Spain_46, Sporto_44, Sprinkle_41, StarLord_43, Stardrop_51, Stayer_43, Sunny4976_48, Sweetclover_41, Synopsis_43, Talon44_55, Tatanka_43, Teacup_45, Tenney120_48, Tenno_45, Tipton_46, Tokki_48, Tribby_48, TrixiePhattel_48, Truckee_42, Trustiboi_44, Uzumaki_45, Westerlin_44, Xenomorph_44, YoshiYama_48, Yotsuba_44, Zeina_48, Zippen_46,

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

-

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

-

Summary by start number:

Start 9:

- Found in 130 of 130 (100.0%) of genes in pham
- Manual Annotations of this start: 94 of 94
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acai_46 (AU1), AddiRose_41 (JA), Altjira_49 (AU6), Anandi_48 (AU4), Arcadia_48 (AM), AreFloNak_45 (AU1), Argan_46 (AU6), Arzan_50 (FI), BarbieDoll_51 (AU6), Barbonzobean_52 (AU6), BenitoAntonio_48 (AM), Benllo_49 (AM), Biscute_47 (AU6), BluerMoon_53 (DJ), Boog_42 (AW), Bouchard_44 (AU2), Bowling_48 (AM), Breylor17_45 (AU1), BronxBay_43 (AW), Brunswick_45 (AU1), CapnMurica_42 (AU1), CastorTray_47 (AU1), Caterpillar_41 (AU4), Cheesy_48 (AM), Chlochlo_46 (AU2), Circum_50 (AM), Correa_46 (AM), Daddyjeff_42 (JA), Darby_43 (AU1), DevitoJr_43 (AU1), Dinallo_44 (AU1), Djungelskog_43 (AW), DoctorPepper_42 (AW), Dynamite_48 (AM), Eevee_44 (JA), Egad_43 (AW), ElephantMan_44 (AU1), Elsa_48 (AM), Gandionco_91 (FK), GantcherGoblin_46 (AU6), Giantsbane_46 (AU2), GoCrazy_47 (AM), Gordon_42 (AU1), Hankly_47 (AM), Heisenberger_47 (AM), Hemma_42 (AU1), HerbBucket_43 (AW), Ingrid_46 (AU3), Inked_48 (AU7), Issa_44 (AU1), JEGGS_47 (AM), Jazzy4900_49 (FI), JeNeSaisPas_89 (FK), Jeremy4pt0_43 (AW), JoyLin_44 (JA), Kardesai_49 (AM), KeaneyLin_47 (AM), KevinMinion_47 (AU6), Kinny_50 (AU6), Kureo_93 (FK), Leatheia_47 (AU6), Lewando_49 (AU6), LilHuddy_46 (AU2), Linda_43 (AW), Loretta_46 (AU3), LucySwiss_45 (AU1), Makai_44 (AU5), Mardi_47 (AU6), Marianna39_92 (FK), Michelle_43 (AW), MiniBagel_44 (AU1), Mooshroom_50 (AM), MrAaronian_43 (AW), Mudcat_45 (AM), Muglass_49 (AU6), NapoleonB_48 (AM), Nason_48 (AM), Natasha_44 (AW), Navi1117_49 (AU6), Nightmare_46 (AU1), Niktson_44 (AU1), Nivinsha_45 (AU1), Onestar_43 (AW), Pepy6_090 (CC), Perkunas_55 (DJ), PerroGrande22_72 (CC), Phaby_46 (AU2), Phaila_49 (AU6), Pippin15_44 (JA), Poco6_088 (CC), PoeMe_47 (AU6), Powelldog_47 (AW), ProfFrink_43 (AW), Raunak_46 (AW), Renaldo_52 (AU6), RustyBoy_44 (AW), Salk_43 (AW), Schwartz33_56 (DJ), ScienceWizSam_45 (AU1), Serenabean_42 (JA), Shepard_48 (AU2), Shiba_42 (AW), Sloopyjoe_43 (AW), Spain_46 (AW), Sporto_44 (AW), Sprinkle_41 (AW), StarLord_43 (AW), Stardrop_51 (AU6), Stayer_43 (AW), Sunny4976_48 (FI), Sweetclover_41 (JA), Synopsis_43 (AU1),

Talon44_55 (DJ), Tatanka_43 (AU1), Teacup_45 (AU1), Tenney120_48 (AU6), Tenno_45 (AU1), Tipton_46 (AU2), Tokki_48 (AU2), Tribby_48 (AM), TrixiePhattel_48 (AU6), Truckee_42 (AU5), Trustiboi_44 (AU1), Uzumaki_45 (AU6), Westerlin_44 (AU1), Xenomorph_44 (AM), YoshiYama_48 (AM), Yotsuba_44 (JA), Zeina_48 (AU6), Zippen_46 (AU7),

Summary by clusters:

There are 14 clusters represented in this pham: DJ, AU7, CC, AM, AU1, AU3, AU2, AU5, AU4, AW, AU6, FI, FK, JA,

Info for manual annotations of cluster AM:

- Start number 9 was manually annotated 20 times for cluster AM.

Info for manual annotations of cluster AU1:

- Start number 9 was manually annotated 19 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 9 was manually annotated 7 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 9 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 9 was manually annotated 1 time for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 9 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 9 was manually annotated 11 times for cluster AU6.

Info for manual annotations of cluster AU7:

- Start number 9 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:

- Start number 9 was manually annotated 18 times for cluster AW.

Info for manual annotations of cluster DJ:

- Start number 9 was manually annotated 4 times for cluster DJ.

Info for manual annotations of cluster JA:

- Start number 9 was manually annotated 8 times for cluster JA.

Gene Information:

Gene: Acai_46 Start: 33525, Stop: 34184, Start Num: 9

Candidate Starts for Acai_46:

(Start: 9 @33525 has 94 MA's), (13, 33594), (18, 33618), (47, 33837), (61, 33960), (97, 34146),

Gene: AddiRose_41 Start: 30292, Stop: 30936, Start Num: 9

Candidate Starts for AddiRose_41:

(Start: 9 @30292 has 94 MA's), (16, 30376), (46, 30583), (52, 30631), (55, 30655), (57, 30670), (63, 30724),

Gene: Altjira_49 Start: 33420, Stop: 33953, Start Num: 9

Candidate Starts for Altjira_49:

(Start: 9 @33420 has 94 MA's), (21, 33534), (28, 33561), (33, 33591), (37, 33615), (52, 33753), (55, 33777), (66, 33873), (77, 33915), (82, 33933),

Gene: Anandi_48 Start: 33821, Stop: 34489, Start Num: 9

Candidate Starts for Anandi_48:

(Start: 9 @33821 has 94 MA's), (13, 33890), (17, 33911), (18, 33914), (53, 34175), (68, 34307), (75, 34331), (76, 34340), (90, 34412), (96, 34445),

Gene: Arcadia_48 Start: 31859, Stop: 32455, Start Num: 9

Candidate Starts for Arcadia_48:

(Start: 9 @31859 has 94 MA's), (30, 32048), (35, 32075), (44, 32174), (53, 32228), (55, 32243), (87, 32447),

Gene: AreFloNak_45 Start: 33292, Stop: 33951, Start Num: 9

Candidate Starts for AreFloNak_45:

(4, 33253), (8, 33268), (Start: 9 @33292 has 94 MA's), (13, 33361), (18, 33385), (32, 33469), (36, 33493), (85, 33847),

Gene: Argan_46 Start: 32018, Stop: 32551, Start Num: 9

Candidate Starts for Argan_46:

(Start: 9 @32018 has 94 MA's), (21, 32132), (28, 32159), (33, 32189), (52, 32351), (55, 32375), (66, 32471), (77, 32513), (82, 32531),

Gene: Arzan_50 Start: 33168, Stop: 33752, Start Num: 9

Candidate Starts for Arzan_50:

(Start: 9 @33168 has 94 MA's), (31, 33333), (33, 33339), (46, 33465), (48, 33474), (63, 33576), (65, 33585), (85, 33672), (93, 33708),

Gene: BarbieDoll_51 Start: 33705, Stop: 34238, Start Num: 9

Candidate Starts for BarbieDoll_51:

(Start: 9 @33705 has 94 MA's), (21, 33819), (28, 33846), (33, 33876), (52, 34038), (55, 34062), (77, 34200), (82, 34218),

Gene: Barbonzobean_52 Start: 33749, Stop: 34282, Start Num: 9

Candidate Starts for Barbonzobean_52:

(Start: 9 @33749 has 94 MA's), (21, 33863), (28, 33890), (33, 33920), (52, 34082), (55, 34106), (77, 34244),

Gene: BenitoAntonio_48 Start: 31423, Stop: 31992, Start Num: 9

Candidate Starts for BenitoAntonio_48:

(Start: 9 @31423 has 94 MA's), (30, 31612), (35, 31639), (43, 31714), (44, 31738), (53, 31792),

Gene: Benllo_49 Start: 32107, Stop: 32676, Start Num: 9

Candidate Starts for Benllo_49:

(Start: 9 @32107 has 94 MA's), (30, 32296), (35, 32323), (43, 32398), (44, 32422), (53, 32476), (55, 32491),

Gene: Biscute_47 Start: 33357, Stop: 33890, Start Num: 9

Candidate Starts for Biscute_47:

(Start: 9 @33357 has 94 MA's), (21, 33471), (28, 33498), (33, 33528), (52, 33690), (55, 33714), (77, 33852),

Gene: BluerMoon_53 Start: 37653, Stop: 38291, Start Num: 9

Candidate Starts for BluerMoon_53:

(Start: 9 @37653 has 94 MA's), (36, 37860), (38, 37866), (52, 38004), (81, 38184), (95, 38262), (98, 38274),

Gene: Boog_42 Start: 30697, Stop: 31257, Start Num: 9

Candidate Starts for Boog_42:

(Start: 9 @30697 has 94 MA's), (16, 30784), (20, 30796), (26, 30826), (29, 30850), (41, 30940), (59, 31099),

Gene: Bouchard_44 Start: 33214, Stop: 33864, Start Num: 9

Candidate Starts for Bouchard_44:

(Start: 9 @33214 has 94 MA's), (13, 33283), (18, 33307),

Gene: Bowling_48 Start: 31632, Stop: 32201, Start Num: 9

Candidate Starts for Bowling_48:

(Start: 9 @31632 has 94 MA's), (30, 31821), (35, 31848), (43, 31923), (44, 31947), (53, 32001),

Gene: Breylor17_45 Start: 34090, Stop: 34749, Start Num: 9

Candidate Starts for Breylor17_45:

(Start: 9 @34090 has 94 MA's), (13, 34159), (18, 34183), (32, 34267), (36, 34291), (61, 34525), (85, 34645), (86, 34657), (92, 34678),

Gene: BronxBay_43 Start: 30995, Stop: 31555, Start Num: 9

Candidate Starts for BronxBay_43:

(Start: 9 @30995 has 94 MA's), (16, 31082), (20, 31094), (26, 31124), (29, 31148), (41, 31238), (59, 31397),

Gene: Brunswick_45 Start: 33172, Stop: 33831, Start Num: 9

Candidate Starts for Brunswick_45:

(Start: 9 @33172 has 94 MA's), (13, 33241), (18, 33265), (55, 33541), (61, 33607), (97, 33793),

Gene: CapnMurica_42 Start: 34070, Stop: 34729, Start Num: 9

Candidate Starts for CapnMurica_42:

(Start: 9 @34070 has 94 MA's), (13, 34139), (18, 34163), (55, 34439), (97, 34691),

Gene: CastorTray_47 Start: 33900, Stop: 34559, Start Num: 9

Candidate Starts for CastorTray_47:

(Start: 9 @33900 has 94 MA's), (13, 33969), (18, 33993), (32, 34077), (36, 34101), (85, 34455),

Gene: Caterpillar_41 Start: 32360, Stop: 33028, Start Num: 9

Candidate Starts for Caterpillar_41:

(6, 32324), (Start: 9 @32360 has 94 MA's), (13, 32429), (18, 32453), (97, 32990), (101, 33023),

Gene: Cheesy_48 Start: 31608, Stop: 32177, Start Num: 9

Candidate Starts for Cheesy_48:

(Start: 9 @31608 has 94 MA's), (30, 31797), (35, 31824), (43, 31899), (44, 31923), (53, 31977),

Gene: Chlochlo_46 Start: 33279, Stop: 33929, Start Num: 9

Candidate Starts for Chlochlo_46:

(Start: 9 @33279 has 94 MA's), (13, 33348), (18, 33372),

Gene: Circum_50 Start: 32270, Stop: 32866, Start Num: 9

Candidate Starts for Circum_50:

(Start: 9 @32270 has 94 MA's), (30, 32459), (35, 32486), (44, 32585), (53, 32639), (55, 32654), (87, 32858),

Gene: Correa_46 Start: 30727, Stop: 31323, Start Num: 9

Candidate Starts for Correa_46:

(Start: 9 @30727 has 94 MA's), (30, 30916), (35, 30943), (43, 31018), (44, 31042), (53, 31096), (55, 31111), (87, 31315),

Gene: Daddyjeff_42 Start: 30571, Stop: 31212, Start Num: 9

Candidate Starts for Daddyjeff_42:

(Start: 9 @30571 has 94 MA's), (16, 30655), (46, 30862), (52, 30910), (63, 31003),

Gene: Darby_43 Start: 33072, Stop: 33731, Start Num: 9

Candidate Starts for Darby_43:

(Start: 9 @33072 has 94 MA's), (13, 33141), (18, 33165), (32, 33249), (36, 33273), (61, 33507), (85, 33627), (86, 33639), (92, 33660),

Gene: DevitoJr_43 Start: 33260, Stop: 33919, Start Num: 9

Candidate Starts for DevitoJr_43:

(Start: 9 @33260 has 94 MA's), (13, 33329), (18, 33353), (32, 33437), (85, 33815), (92, 33848),

Gene: Dinallo_44 Start: 34379, Stop: 35038, Start Num: 9

Candidate Starts for Dinallo_44:

(Start: 9 @34379 has 94 MA's), (13, 34448), (18, 34472), (55, 34748), (97, 35000),

Gene: Djungelskog_43 Start: 30994, Stop: 31554, Start Num: 9

Candidate Starts for Djungelskog_43:

(Start: 9 @30994 has 94 MA's), (16, 31081), (20, 31093), (26, 31123), (29, 31147), (41, 31237), (59, 31396),

Gene: DoctorPepper_42 Start: 30699, Stop: 31259, Start Num: 9

Candidate Starts for DoctorPepper_42:

(Start: 9 @30699 has 94 MA's), (16, 30786), (20, 30798), (26, 30828), (29, 30852), (41, 30942), (59, 31101),

Gene: Dynamite_48 Start: 31823, Stop: 32392, Start Num: 9

Candidate Starts for Dynamite_48:

(Start: 9 @31823 has 94 MA's), (30, 32012), (35, 32039), (43, 32114), (44, 32138), (53, 32192),

Gene: Eevee_44 Start: 33674, Stop: 34315, Start Num: 9

Candidate Starts for Eevee_44:

(Start: 9 @33674 has 94 MA's), (12, 33704), (14, 33752), (33, 33848), (46, 33968), (51, 34010), (52, 34016), (63, 34103),

Gene: Egad_43 Start: 30996, Stop: 31556, Start Num: 9

Candidate Starts for Egad_43:

(Start: 9 @30996 has 94 MA's), (16, 31083), (20, 31095), (26, 31125), (29, 31149), (41, 31239), (59, 31398),

Gene: ElephantMan_44 Start: 33745, Stop: 34404, Start Num: 9

Candidate Starts for ElephantMan_44:

(Start: 9 @33745 has 94 MA's), (13, 33814), (18, 33838), (61, 34180), (97, 34366),

Gene: Elsa_48 Start: 31859, Stop: 32455, Start Num: 9

Candidate Starts for Elsa_48:

(Start: 9 @31859 has 94 MA's), (30, 32048), (35, 32075), (44, 32174), (53, 32228), (55, 32243), (87, 32447),

Gene: Gandionco_91 Start: 51754, Stop: 52386, Start Num: 9

Candidate Starts for Gandionco_91:

(4, 51715), (Start: 9 @51754 has 94 MA's), (11, 51769), (42, 52006), (49, 52075), (54, 52102), (65, 52198), (93, 52342),

Gene: GantcherGoblin_46 Start: 32217, Stop: 32750, Start Num: 9

Candidate Starts for GantcherGoblin_46:

(Start: 9 @32217 has 94 MA's), (21, 32331), (28, 32358), (33, 32388), (37, 32412), (52, 32550), (55, 32574), (66, 32670), (77, 32712), (82, 32730),

Gene: Giantsbane_46 Start: 32465, Stop: 33115, Start Num: 9

Candidate Starts for Giantsbane_46:

(2, 32420), (7, 32435), (Start: 9 @32465 has 94 MA's), (13, 32534), (18, 32558),

Gene: GoCrazy_47 Start: 31735, Stop: 32331, Start Num: 9

Candidate Starts for GoCrazy_47:

(Start: 9 @31735 has 94 MA's), (30, 31924), (35, 31951), (44, 32050), (53, 32104), (55, 32119), (87, 32323),

Gene: Gordon_42 Start: 33925, Stop: 34584, Start Num: 9

Candidate Starts for Gordon_42:

(Start: 9 @33925 has 94 MA's), (13, 33994), (18, 34018), (32, 34102), (36, 34126), (61, 34360), (92, 34513),

Gene: Hankly_47 Start: 31036, Stop: 31605, Start Num: 9

Candidate Starts for Hankly_47:

(Start: 9 @31036 has 94 MA's), (30, 31225), (35, 31252), (43, 31327), (44, 31351), (53, 31405),

Gene: Heisenberger_47 Start: 31299, Stop: 31895, Start Num: 9

Candidate Starts for Heisenberger_47:

(Start: 9 @31299 has 94 MA's), (30, 31488), (35, 31515), (43, 31590), (44, 31614), (53, 31668), (55, 31683), (87, 31887),

Gene: Hemma_42 Start: 30335, Stop: 30985, Start Num: 9

Candidate Starts for Hemma_42:

(3, 30293), (5, 30299), (Start: 9 @30335 has 94 MA's), (13, 30404), (17, 30425), (18, 30428), (74, 30830), (85, 30881), (90, 30908),

Gene: HerbBucket_43 Start: 30696, Stop: 31256, Start Num: 9

Candidate Starts for HerbBucket_43:

(Start: 9 @30696 has 94 MA's), (16, 30783), (20, 30795), (26, 30825), (29, 30849), (41, 30939), (59, 31098),

Gene: Ingrid_46 Start: 33203, Stop: 33853, Start Num: 9

Candidate Starts for Ingrid_46:

(3, 33164), (5, 33170), (Start: 9 @33203 has 94 MA's), (13, 33272), (18, 33296), (60, 33608), (74, 33698), (85, 33749), (90, 33776),

Gene: Inked_48 Start: 34345, Stop: 34989, Start Num: 9

Candidate Starts for Inked_48:

(Start: 9 @34345 has 94 MA's), (13, 34414),

Gene: Issa_44 Start: 33364, Stop: 34023, Start Num: 9

Candidate Starts for Issa_44:

(Start: 9 @33364 has 94 MA's), (13, 33433), (18, 33457), (36, 33565), (55, 33733), (61, 33799), (92, 33952), (97, 33985),

Gene: JEGGS_47 Start: 31353, Stop: 31949, Start Num: 9

Candidate Starts for JEGGS_47:

(Start: 9 @31353 has 94 MA's), (30, 31542), (35, 31569), (43, 31644), (44, 31668), (53, 31722), (55, 31737), (87, 31941),

Gene: Jazzy4900_49 Start: 33968, Stop: 34558, Start Num: 9

Candidate Starts for Jazzy4900_49:

(Start: 9 @33968 has 94 MA's), (10, 33971), (24, 34091), (31, 34133), (33, 34139), (46, 34265), (48, 34274), (63, 34376), (65, 34385), (72, 34427), (93, 34514),

Gene: JeNeSaisPas_89 Start: 52328, Stop: 52960, Start Num: 9

Candidate Starts for JeNeSaisPas_89:

(4, 52289), (Start: 9 @52328 has 94 MA's), (11, 52343), (42, 52580), (49, 52649), (54, 52676), (65, 52772), (93, 52916),

Gene: Jeremy4pt0_43 Start: 30694, Stop: 31254, Start Num: 9

Candidate Starts for Jeremy4pt0_43:

(Start: 9 @30694 has 94 MA's), (16, 30781), (20, 30793), (26, 30823), (29, 30847), (41, 30937), (59, 31096),

Gene: JoyLin_44 Start: 33794, Stop: 34435, Start Num: 9

Candidate Starts for JoyLin_44:

(Start: 9 @33794 has 94 MA's), (12, 33824), (14, 33872), (33, 33968), (46, 34088), (52, 34136), (63, 34223),

Gene: Kardesai_49 Start: 32007, Stop: 32576, Start Num: 9

Candidate Starts for Kardesai_49:

(Start: 9 @32007 has 94 MA's), (30, 32196), (35, 32223), (43, 32298), (44, 32322), (53, 32376),

Gene: KeaneyLin_47 Start: 31735, Stop: 32331, Start Num: 9

Candidate Starts for KeaneyLin_47:

(Start: 9 @31735 has 94 MA's), (30, 31924), (35, 31951), (44, 32050), (53, 32104), (55, 32119), (87, 32323),

Gene: KevinMinion_47 Start: 32975, Stop: 33508, Start Num: 9

Candidate Starts for KevinMinion_47:

(Start: 9 @32975 has 94 MA's), (21, 33089), (28, 33116), (33, 33146), (37, 33170), (52, 33308), (55, 33332), (66, 33428), (77, 33470), (82, 33488),

Gene: Kinny_50 Start: 34199, Stop: 34732, Start Num: 9

Candidate Starts for Kinny_50:

(Start: 9 @34199 has 94 MA's), (21, 34313), (28, 34340), (33, 34370), (52, 34532), (55, 34556), (77, 34694), (82, 34712),

Gene: Kureo_93 Start: 51908, Stop: 52540, Start Num: 9

Candidate Starts for Kureo_93:

(4, 51869), (Start: 9 @51908 has 94 MA's), (11, 51923), (42, 52160), (49, 52229), (54, 52256), (65, 52352), (93, 52496),

Gene: Leathea_47 Start: 31879, Stop: 32409, Start Num: 9

Candidate Starts for Leathea_47:

(Start: 9 @31879 has 94 MA's), (16, 31966), (21, 31993), (28, 32020), (33, 32050), (52, 32212), (55, 32236), (77, 32371), (82, 32389),

Gene: Lewando_49 Start: 33491, Stop: 34024, Start Num: 9

Candidate Starts for Lewando_49:

(Start: 9 @33491 has 94 MA's), (21, 33605), (28, 33632), (33, 33662), (52, 33824), (55, 33848), (77, 33986), (82, 34004),

Gene: LilHuddy_46 Start: 33411, Stop: 34067, Start Num: 9

Candidate Starts for LilHuddy_46:

(Start: 9 @33411 has 94 MA's), (13, 33480), (18, 33504),

Gene: Linda_43 Start: 30992, Stop: 31552, Start Num: 9

Candidate Starts for Linda_43:

(Start: 9 @30992 has 94 MA's), (16, 31079), (20, 31091), (26, 31121), (29, 31145), (41, 31235), (59, 31394),

Gene: Loretta_46 Start: 33203, Stop: 33853, Start Num: 9

Candidate Starts for Loretta_46:

(3, 33164), (5, 33170), (Start: 9 @33203 has 94 MA's), (13, 33272), (18, 33296), (60, 33608), (74, 33698), (85, 33749), (90, 33776),

Gene: LucySwiss_45 Start: 33166, Stop: 33825, Start Num: 9

Candidate Starts for LucySwiss_45:

(Start: 9 @33166 has 94 MA's), (13, 33235), (18, 33259), (55, 33535), (61, 33601), (92, 33754), (97, 33787),

Gene: Makai_44 Start: 33397, Stop: 34047, Start Num: 9

Candidate Starts for Makai_44:

(Start: 9 @33397 has 94 MA's), (13, 33466), (18, 33490), (36, 33598),

Gene: Mardi_47 Start: 32309, Stop: 32842, Start Num: 9

Candidate Starts for Mardi_47:

(Start: 9 @32309 has 94 MA's), (21, 32423), (28, 32450), (33, 32480), (37, 32504), (52, 32642), (55, 32666), (66, 32762), (77, 32804), (82, 32822),

Gene: Marianna39_92 Start: 52323, Stop: 52955, Start Num: 9

Candidate Starts for Marianna39_92:

(4, 52284), (Start: 9 @52323 has 94 MA's), (11, 52338), (42, 52575), (49, 52644), (54, 52671), (65, 52767), (93, 52911),

Gene: Michelle_43 Start: 30994, Stop: 31554, Start Num: 9

Candidate Starts for Michelle_43:

(Start: 9 @30994 has 94 MA's), (16, 31081), (20, 31093), (26, 31123), (29, 31147), (41, 31237), (59, 31396),

Gene: MiniBagel_44 Start: 34052, Stop: 34711, Start Num: 9

Candidate Starts for MiniBagel_44:

(Start: 9 @34052 has 94 MA's), (13, 34121), (18, 34145), (55, 34421), (97, 34673),

Gene: Mooshroom_50 Start: 32007, Stop: 32576, Start Num: 9

Candidate Starts for Mooshroom_50:

(Start: 9 @32007 has 94 MA's), (30, 32196), (35, 32223), (43, 32298), (44, 32322), (53, 32376),

Gene: MrAaronian_43 Start: 30994, Stop: 31554, Start Num: 9

Candidate Starts for MrAaronian_43:

(Start: 9 @30994 has 94 MA's), (16, 31081), (20, 31093), (26, 31123), (29, 31147), (41, 31237), (59, 31396),

Gene: Mudcat_45 Start: 32712, Stop: 33308, Start Num: 9

Candidate Starts for Mudcat_45:

(Start: 9 @32712 has 94 MA's), (30, 32901), (35, 32928), (43, 33003), (44, 33027), (53, 33081), (55, 33096), (87, 33300),

Gene: Muglass_49 Start: 33261, Stop: 33794, Start Num: 9

Candidate Starts for Muglass_49:

(Start: 9 @33261 has 94 MA's), (21, 33375), (28, 33402), (33, 33432), (52, 33594), (55, 33618), (77, 33756),

Gene: NapoleonB_48 Start: 31823, Stop: 32392, Start Num: 9

Candidate Starts for NapoleonB_48:

(Start: 9 @31823 has 94 MA's), (30, 32012), (35, 32039), (43, 32114), (44, 32138), (53, 32192),

Gene: Nason_48 Start: 31859, Stop: 32455, Start Num: 9

Candidate Starts for Nason_48:

(Start: 9 @31859 has 94 MA's), (30, 32048), (35, 32075), (44, 32174), (53, 32228), (55, 32243), (87, 32447),

Gene: Natasha_44 Start: 30712, Stop: 31287, Start Num: 9

Candidate Starts for Natasha_44:

(Start: 9 @30712 has 94 MA's), (16, 30799), (18, 30805), (26, 30841), (27, 30844), (35, 30910), (54, 31069), (65, 31147),

Gene: Navi1117_49 Start: 32920, Stop: 33453, Start Num: 9

Candidate Starts for Navi1117_49:

(Start: 9 @32920 has 94 MA's), (13, 32989), (21, 33034), (28, 33061), (33, 33091), (37, 33115), (52, 33253), (55, 33277), (66, 33373), (77, 33415), (82, 33433),

Gene: Nightmare_46 Start: 34312, Stop: 34971, Start Num: 9

Candidate Starts for Nightmare_46:

(Start: 9 @34312 has 94 MA's), (13, 34381), (18, 34405), (55, 34681), (58, 34699), (61, 34747), (97, 34933),

Gene: Niktson_44 Start: 33745, Stop: 34404, Start Num: 9

Candidate Starts for Niktson_44:

(Start: 9 @33745 has 94 MA's), (13, 33814), (18, 33838), (61, 34180), (97, 34366),

Gene: Nivinsha_45 Start: 33292, Stop: 33951, Start Num: 9

Candidate Starts for Nivinsha_45:

(4, 33253), (8, 33268), (Start: 9 @33292 has 94 MA's), (13, 33361), (18, 33385), (32, 33469), (36, 33493), (85, 33847),

Gene: Onestar_43 Start: 30682, Stop: 31287, Start Num: 9

Candidate Starts for Onestar_43:

(3, 30643), (5, 30649), (Start: 9 @30682 has 94 MA's), (17, 30772), (18, 30775), (20, 30781), (23, 30802), (26, 30811), (29, 30835), (41, 30925), (59, 31084),

Gene: Pepy6_090 Start: 47253, Stop: 47894, Start Num: 9

Candidate Starts for Pepy6_090:

(Start: 9 @47253 has 94 MA's), (22, 47376), (25, 47385), (36, 47457), (47, 47568), (50, 47589), (52, 47601), (54, 47613), (55, 47625), (69, 47742), (78, 47772), (79, 47781), (88, 47826), (100, 47883),

Gene: Perkunas_55 Start: 36810, Stop: 37424, Start Num: 9

Candidate Starts for Perkunas_55:

(Start: 9 @36810 has 94 MA's), (10, 36813), (20, 36912), (36, 37017), (52, 37161), (76, 37317), (79, 37332), (98, 37410),

Gene: PerroGrande22_72 Start: 49695, Stop: 50330, Start Num: 9

Candidate Starts for PerroGrande22_72:

(Start: 9 @49695 has 94 MA's), (34, 49893), (36, 49899), (45, 50001), (47, 50010), (54, 50055), (67, 50172), (70, 50178), (88, 50262), (95, 50301),

Gene: Phaby_46 Start: 33645, Stop: 34295, Start Num: 9

Candidate Starts for Phaby_46:

(Start: 9 @33645 has 94 MA's), (13, 33714), (18, 33738),

Gene: Phaila_49 Start: 32107, Stop: 32637, Start Num: 9

Candidate Starts for Phaila_49:

(Start: 9 @32107 has 94 MA's), (13, 32176), (21, 32221), (28, 32248), (33, 32278), (37, 32302), (52, 32440), (55, 32464), (66, 32560), (77, 32602),

Gene: Pippin15_44 Start: 30581, Stop: 31216, Start Num: 9

Candidate Starts for Pippin15_44:

(Start: 9 @30581 has 94 MA's), (14, 30659), (33, 30755), (46, 30875), (51, 30917), (52, 30923), (63, 31010), (73, 31058),

Gene: Poco6_088 Start: 49493, Stop: 50125, Start Num: 9

Candidate Starts for Poco6_088:

(Start: 9 @49493 has 94 MA's), (22, 49616), (25, 49625), (36, 49697), (47, 49808), (50, 49829), (52, 49841), (54, 49853), (55, 49865), (60, 49901), (67, 49967), (70, 49973), (80, 50012), (88, 50057), (91, 50069), (94, 50093), (95, 50096),

Gene: PoeMe_47 Start: 32476, Stop: 33009, Start Num: 9

Candidate Starts for PoeMe_47:

(Start: 9 @32476 has 94 MA's), (13, 32545), (21, 32590), (28, 32617), (33, 32647), (37, 32671), (52, 32809), (55, 32833), (66, 32929), (77, 32971), (82, 32989),

Gene: Powelldog_47 Start: 31692, Stop: 32306, Start Num: 9

Candidate Starts for Powelldog_47:

(Start: 9 @31692 has 94 MA's), (16, 31779), (18, 31785), (20, 31791), (26, 31821), (36, 31893), (54, 32049), (55, 32061), (56, 32073), (84, 32217), (89, 32241), (99, 32289),

Gene: ProfFrink_43 Start: 30995, Stop: 31555, Start Num: 9

Candidate Starts for ProfFrink_43:

(Start: 9 @30995 has 94 MA's), (16, 31082), (20, 31094), (26, 31124), (29, 31148), (41, 31238), (59, 31397),

Gene: Raunak_46 Start: 30692, Stop: 31252, Start Num: 9

Candidate Starts for Raunak_46:

(Start: 9 @30692 has 94 MA's), (16, 30779), (20, 30791), (26, 30821), (29, 30845), (41, 30935), (59, 31094),

Gene: Renaldo_52 Start: 33800, Stop: 34333, Start Num: 9

Candidate Starts for Renaldo_52:

(Start: 9 @33800 has 94 MA's), (21, 33914), (28, 33941), (33, 33971), (52, 34133), (55, 34157), (77, 34295),

Gene: RustyBoy_44 Start: 30693, Stop: 31268, Start Num: 9

Candidate Starts for RustyBoy_44:

(Start: 9 @30693 has 94 MA's), (16, 30780), (18, 30786), (26, 30822), (27, 30825), (35, 30891), (40, 30921), (54, 31050), (65, 31128),

Gene: Salk_43 Start: 30992, Stop: 31552, Start Num: 9

Candidate Starts for Salk_43:

(Start: 9 @30992 has 94 MA's), (16, 31079), (20, 31091), (26, 31121), (29, 31145), (41, 31235), (59, 31394),

Gene: Schwartz33_56 Start: 37627, Stop: 38241, Start Num: 9

Candidate Starts for Schwartz33_56:

(Start: 9 @37627 has 94 MA's), (19, 37723), (32, 37810), (36, 37834), (52, 37978), (64, 38068), (95, 38212), (98, 38224),

Gene: ScienceWizSam_45 Start: 33402, Stop: 34061, Start Num: 9

Candidate Starts for ScienceWizSam_45:

(Start: 9 @33402 has 94 MA's), (13, 33471), (18, 33495), (32, 33579), (85, 33957), (86, 33969),

Gene: Serenabean_42 Start: 30574, Stop: 31215, Start Num: 9

Candidate Starts for Serenabean_42:

(Start: 9 @30574 has 94 MA's), (16, 30658), (46, 30865), (52, 30913), (57, 30952), (63, 31006),

Gene: Shepard_48 Start: 33483, Stop: 34139, Start Num: 9

Candidate Starts for Shepard_48:

(Start: 9 @33483 has 94 MA's), (13, 33552), (18, 33576), (39, 33702),

Gene: Shiba_42 Start: 30692, Stop: 31252, Start Num: 9

Candidate Starts for Shiba_42:

(Start: 9 @30692 has 94 MA's), (16, 30779), (20, 30791), (26, 30821), (29, 30845), (41, 30935), (59, 31094),

Gene: Sloopyjoe_43 Start: 30996, Stop: 31556, Start Num: 9

Candidate Starts for Sloopyjoe_43:

(Start: 9 @30996 has 94 MA's), (16, 31083), (20, 31095), (26, 31125), (29, 31149), (41, 31239), (59, 31398),

Gene: Spain_46 Start: 30994, Stop: 31554, Start Num: 9

Candidate Starts for Spain_46:

(Start: 9 @30994 has 94 MA's), (16, 31081), (20, 31093), (26, 31123), (29, 31147), (41, 31237), (59, 31396),

Gene: Sporto_44 Start: 32458, Stop: 33057, Start Num: 9

Candidate Starts for Sporto_44:

(1, 32404), (Start: 9 @32458 has 94 MA's), (15, 32542), (17, 32548), (18, 32551), (20, 32557), (29, 32611), (36, 32659), (41, 32701), (54, 32824), (55, 32836), (56, 32848),

Gene: Sprinkle_41 Start: 30831, Stop: 31406, Start Num: 9

Candidate Starts for Sprinkle_41:

(Start: 9 @30831 has 94 MA's), (16, 30918), (18, 30924), (26, 30960), (27, 30963), (35, 31029), (39, 31050), (47, 31143), (54, 31188), (59, 31224), (65, 31266), (86, 31341),

Gene: StarLord_43 Start: 30995, Stop: 31555, Start Num: 9

Candidate Starts for StarLord_43:

(Start: 9 @30995 has 94 MA's), (16, 31082), (20, 31094), (26, 31124), (29, 31148), (41, 31238), (59, 31397),

Gene: Stardrop_51 Start: 32669, Stop: 33202, Start Num: 9

Candidate Starts for Stardrop_51:

(Start: 9 @32669 has 94 MA's), (21, 32783), (28, 32810), (33, 32840), (37, 32864), (52, 33002), (55, 33026), (66, 33122), (77, 33164), (82, 33182),

Gene: Stayer_43 Start: 30992, Stop: 31552, Start Num: 9

Candidate Starts for Stayer_43:

(Start: 9 @30992 has 94 MA's), (16, 31079), (20, 31091), (26, 31121), (29, 31145), (41, 31235), (59, 31394),

Gene: Sunny4976_48 Start: 33968, Stop: 34558, Start Num: 9

Candidate Starts for Sunny4976_48:

(Start: 9 @33968 has 94 MA's), (10, 33971), (24, 34091), (31, 34133), (33, 34139), (46, 34265), (48, 34274), (63, 34376), (65, 34385), (72, 34427), (93, 34514),

Gene: Sweetclover_41 Start: 29341, Stop: 30015, Start Num: 9

Candidate Starts for Sweetclover_41:

(Start: 9 @29341 has 94 MA's), (16, 29425), (33, 29512), (46, 29632), (48, 29641), (52, 29680), (57, 29719), (68, 29824), (71, 29830), (83, 29887),

Gene: Synopsis_43 Start: 33411, Stop: 34073, Start Num: 9

Candidate Starts for Synopsis_43:

(Start: 9 @33411 has 94 MA's), (13, 33480), (18, 33504), (36, 33612), (55, 33780), (61, 33846), (97, 34035),

Gene: Talon44_55 Start: 36844, Stop: 37458, Start Num: 9

Candidate Starts for Talon44_55:

(Start: 9 @36844 has 94 MA's), (10, 36847), (20, 36946), (36, 37051), (52, 37195), (76, 37351), (79, 37366), (98, 37444),

Gene: Tatanka_43 Start: 33581, Stop: 34243, Start Num: 9

Candidate Starts for Tatanka_43:

(Start: 9 @33581 has 94 MA's), (13, 33650), (18, 33674), (61, 34016), (97, 34205),

Gene: Teacup_45 Start: 33771, Stop: 34433, Start Num: 9

Candidate Starts for Teacup_45:

(Start: 9 @33771 has 94 MA's), (13, 33840), (18, 33864), (55, 34140), (61, 34206), (97, 34395),

Gene: Tenney120_48 Start: 32517, Stop: 33050, Start Num: 9

Candidate Starts for Tenney120_48:

(Start: 9 @32517 has 94 MA's), (21, 32631), (28, 32658), (33, 32688), (37, 32712), (52, 32850), (55, 32874), (66, 32970), (77, 33012), (82, 33030),

Gene: Tenno_45 Start: 34060, Stop: 34719, Start Num: 9

Candidate Starts for Tenno_45:

(Start: 9 @34060 has 94 MA's), (13, 34129), (18, 34153), (55, 34429), (97, 34681),

Gene: Tipton_46 Start: 33617, Stop: 34267, Start Num: 9

Candidate Starts for Tipton_46:

(Start: 9 @33617 has 94 MA's), (13, 33686), (18, 33710),

Gene: Tokki_48 Start: 33269, Stop: 33919, Start Num: 9

Candidate Starts for Tokki_48:

(2, 33224), (7, 33239), (Start: 9 @33269 has 94 MA's), (13, 33338), (18, 33362),

Gene: Tribby_48 Start: 31560, Stop: 32129, Start Num: 9

Candidate Starts for Tribby_48:

(Start: 9 @31560 has 94 MA's), (30, 31749), (35, 31776), (43, 31851), (44, 31875), (53, 31929), (55, 31944),

Gene: TrixiePhattel_48 Start: 32174, Stop: 32704, Start Num: 9

Candidate Starts for TrixiePhattel_48:

(Start: 9 @32174 has 94 MA's), (16, 32261), (21, 32288), (28, 32315), (33, 32345), (52, 32507), (55, 32531), (62, 32600),

Gene: Truckee_42 Start: 33185, Stop: 33835, Start Num: 9

Candidate Starts for Truckee_42:

(Start: 9 @33185 has 94 MA's), (13, 33254), (18, 33278), (36, 33386),

Gene: Trustiboi_44 Start: 33620, Stop: 34279, Start Num: 9

Candidate Starts for Trustiboi_44:

(Start: 9 @33620 has 94 MA's), (13, 33689), (18, 33713), (32, 33797), (36, 33821), (85, 34175), (86, 34187), (92, 34208),

Gene: Uzumaki_45 Start: 32211, Stop: 32744, Start Num: 9

Candidate Starts for Uzumaki_45:

(Start: 9 @32211 has 94 MA's), (21, 32325), (28, 32352), (33, 32382), (37, 32406), (52, 32544), (55, 32568), (66, 32664), (77, 32706), (82, 32724),

Gene: Westerlin_44 Start: 34882, Stop: 35541, Start Num: 9

Candidate Starts for Westerlin_44:

(Start: 9 @34882 has 94 MA's), (13, 34951), (18, 34975), (36, 35083), (55, 35251), (61, 35317), (92, 35470), (97, 35503),

Gene: Xenomorph_44 Start: 31272, Stop: 31862, Start Num: 9

Candidate Starts for Xenomorph_44:

(Start: 9 @31272 has 94 MA's), (30, 31461), (35, 31488), (43, 31563), (44, 31587), (53, 31641), (55, 31656), (66, 31755),

Gene: YoshiYama_48 Start: 31854, Stop: 32450, Start Num: 9

Candidate Starts for YoshiYama_48:

(Start: 9 @31854 has 94 MA's), (30, 32043), (35, 32070), (44, 32169), (53, 32223), (55, 32238), (87, 32442),

Gene: Yotsuba_44 Start: 33812, Stop: 34453, Start Num: 9

Candidate Starts for Yotsuba_44:

(Start: 9 @33812 has 94 MA's), (12, 33842), (14, 33890), (33, 33986), (46, 34106), (51, 34148), (52, 34154), (63, 34241),

Gene: Zeina_48 Start: 32530, Stop: 33063, Start Num: 9

Candidate Starts for Zeina_48:

(Start: 9 @32530 has 94 MA's), (21, 32644), (28, 32671), (33, 32701), (37, 32725), (52, 32863), (55, 32887), (66, 32983), (77, 33025), (82, 33043),

Gene: Zippen_46 Start: 34044, Stop: 34688, Start Num: 9

Candidate Starts for Zippen_46:

(Start: 9 @34044 has 94 MA's), (13, 34113),