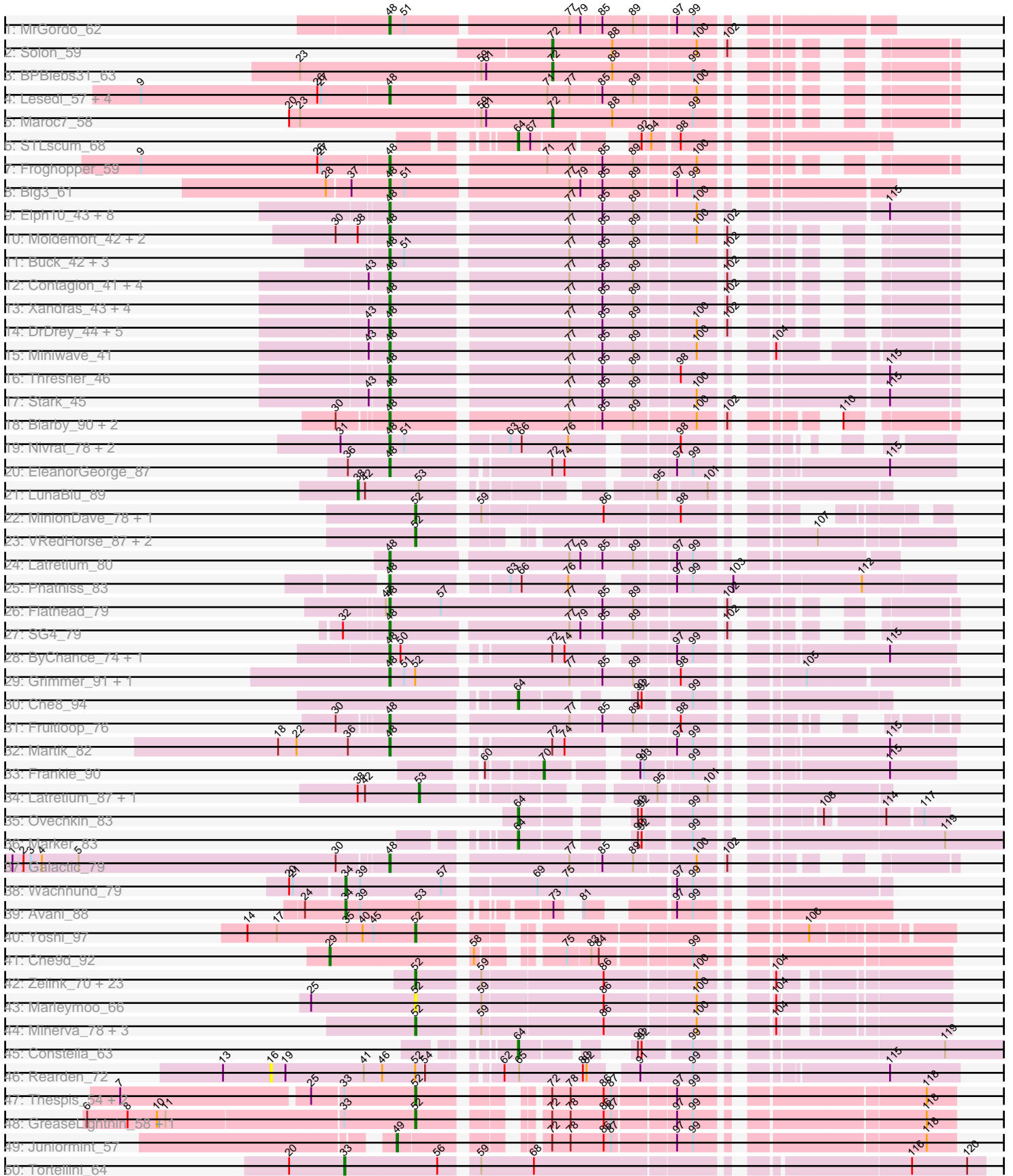
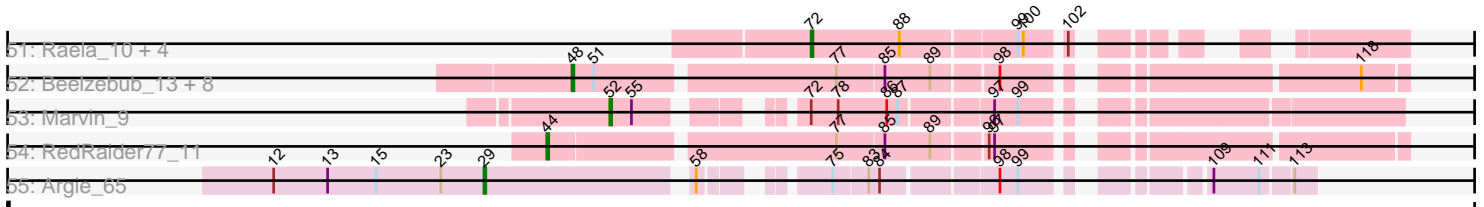


Pham 224386



Pham 224386



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 224386 Report

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

Pham number 224386 has 136 members, 8 are drafts.

Phages represented in each track:

- Track 1 : MrGordo_62
- Track 2 : Solon_59
- Track 3 : BPBiebs31_63
- Track 4 : Lesedi_57, Fajezeel_62, Acme_63, Bxb1_55, Greg_62
- Track 5 : Maroc7_58
- Track 6 : STLscum_68
- Track 7 : Frogopper_59
- Track 8 : Big3_61
- Track 9 : Elph10_43, NoSleep_45, Maxxinista_45, Lilac_46, Cjw1_44, Lilizi_43, Czyszczon1_44, RiverMonster_44, Murphy_45
- Track 10 : Moldemort_42, MadamMonkfish_42, AmericanBeauty_43
- Track 11 : Buck_42, StormChicken_43, Rimmer_42, Youngblood_43
- Track 12 : Contagion_41, Cookies_41, Mosby_40, TeardropMSU_40, Tomaszewski_40
- Track 13 : Xandras_43, JeTaime_44, OrionPax_43, Filch_44, Pumpkin_45
- Track 14 : DrDrey_44, Hopey_44, Phrux_42, HanKaySha_43, ShereKhan_42, 244_45
- Track 15 : Miniwave_41
- Track 16 : Thresher_46
- Track 17 : Stark_45
- Track 18 : Blarby_90, Zapner_89, Jabbawokkie_90
- Track 19 : Nivrat_78, Che8_85, LilMoolah_80
- Track 20 : EleanorGeorge_87
- Track 21 : LunaBlu_89
- Track 22 : MinionDave_78, CaptainTrips_82
- Track 23 : VRedHorse_87, Estave1_94, Avani_91
- Track 24 : Latretium_80
- Track 25 : Phatniss_83
- Track 26 : Flathead_79
- Track 27 : SG4_79
- Track 28 : ByChance_74, ShowerHandel_83
- Track 29 : Grimmer_91, Mahavrat_77
- Track 30 : Che8_94
- Track 31 : Fruitloop_76
- Track 32 : Martik_82
- Track 33 : Frankie_90
- Track 34 : Latretium_87, Dante_84

- Track 35 : Ovechkin_83
- Track 36 : Marker_83
- Track 37 : Galactic_79
- Track 38 : Wachhund_79
- Track 39 : Avani_88
- Track 40 : Yoshi_97
- Track 41 : Che9d_92
- Track 42 : Zelink_70, Superphikiman_70, Schatzie_67, Kalah2_67, Ejimix_72, Squint_73, Beem_72, JuicyJay_71, NihilNomen_73, Phoebus_75, DmpstrDiver_72, Dallas_71, Odette_71, HokkenD_65, FairyPath_41, Porcelain_72, ThreeRngTarjay_70, Redno2_69, Qualification_42, MiaZeal_73, Halley_74, Lucky2013_70, Hughesyang_71, Ariel_72
- Track 43 : Marleymoo_66
- Track 44 : Minerva_78, Latretium_83, Wanda_76, Klein_72
- Track 45 : Constella_63
- Track 46 : Rearden_72
- Track 47 : Thespiis_54, Brusacoram_54, Atcoo_54
- Track 48 : GreaseLightnin_58, StevieRay_57
- Track 49 : Juniormint_57
- Track 50 : Tortellini_64
- Track 51 : Raela_10, Tesla_10, Poise_10, SG4_82, Blackbeetle_10
- Track 52 : Beelzebub_13, FeliMaine_11, Lilbit_11, LittleLaf_10, Pringar_10, Clarkson_11, JoieB_11, Huphlepuuff_11, Corazon_10
- Track 53 : Marvin_9
- Track 54 : RedRaider77_11
- Track 55 : Argie_65

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

The start number called the most often in the published annotations is 48, it was called in 66 of the 128 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_45, Acme_63, AmericanBeauty_43, Beelzebub_13, Big3_61, Blarby_90, Buck_42, Bxb1_55, ByChance_74, Che8_85, Cjw1_44, Clarkson_11, Contagion_41, Cookies_41, Corazon_10, Czyszczonek_44, DrDrey_44, EleanorGeorge_87, Elph10_43, Fajezeel_62, FeliMaine_11, Filch_44, Flathead_79, Froghopper_59, Fruitloop_76, Galactic_79, Greg_62, Grimmer_91, HanKaySha_43, Hopey_44, Huphlepuuff_11, Jabbawokkie_90, JeTaime_44, JoieB_11, Latretium_80, Lesedi_57, LilMoolah_80, Lilac_46, Lilbit_11, Lilizi_43, LittleLaf_10, MadamMonkfish_42, Mahavrat_77, Martik_82, Maxxinista_45, Miniwave_41, Moldemort_42, Mosby_40, MrGordo_62, Murphy_45, Nivrat_78, NoSleep_45, OrionPax_43, Phatniss_83, Phrux_42, Pringar_10, Pumpkin_45, Rimmer_42, RiverMonster_44, SG4_79, ShereKhan_42, ShowerHandel_83, Stark_45, StormChicken_43, TeardropMSU_40, Thresher_46, Tomaszewski_40, Xandras_43, Youngblood_43, Zapner_89,

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

-

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

- Argie_65, Ariel_72, Atcoo_54, Avani_88, Avani_91, BPBiebs31_63, Beem_72, Blackbeetle_10, Brusacoram_54, CaptainTrips_82, Che8_94, Che9d_92, Constella_63, Dallas_71, Dante_84, DmpstrDiver_72, Ejimix_72, Estave1_94, FairyPath_41, Frankie_90, GreaseLightnin_58, Halley_74, HokkenD_65, Hughesyang_71, JuicyJay_71, Juniomint_57, Kalah2_67, Klein_72, Latretium_83, Latretium_87, Lucky2013_70, LunaBlu_89, Marker_83, Marleymoo_66, Maroc7_58, Marvin_9, MiaZeal_73, Minerva_78, MinionDave_78, NihilNomen_73, Odette_71, Ovechkin_83, Phoebus_75, Poise_10, Porcelain_72, Qualification_42, Raela_10, Rearden_72, RedRaider77_11, Redno2_69, SG4_82, STLscum_68, Schatzie_67, Solon_59, Squint_73, StevieRay_57, Superphikiman_70, Tesla_10, Thespis_54, ThreeRngTarjay_70, Tortellini_64, VRedHorse_87, Wachhund_79, Wanda_76, Yoshi_97, Zelink_70,

Summary by start number:

Start 16:

- Found in 1 of 136 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rearden_72 (J),

Start 29:

- Found in 2 of 136 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Argie_65 (W), Che9d_92 (F2),

Start 33:

- Found in 6 of 136 (4.4%) of genes in pham
- Manual Annotations of this start: 1 of 128
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Tortellini_64 (P2),

Start 34:

- Found in 2 of 136 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Avani_88 (F2), Wachhund_79 (F1),

Start 38:

- Found in 6 of 136 (4.4%) of genes in pham
- Manual Annotations of this start: 1 of 128
- Called 16.7% of time when present
- Phage (with cluster) where this start called: LunaBlu_89 (F1),

Start 44:

- Found in 1 of 136 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedRaider77_11 (S),

Start 48:

- Found in 70 of 136 (51.5%) of genes in pham

- Manual Annotations of this start: 66 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 244_45 (E), Acme_63 (A1), AmericanBeauty_43 (E), Beelzebub_13 (S), Big3_61 (A1), Blarby_90 (F), Buck_42 (E), Bxb1_55 (A1), ByChance_74 (F1), Che8_85 (F1), Cjw1_44 (E), Clarkson_11 (S), Contagion_41 (E), Cookies_41 (E), Corazon_10 (S), Czyszczonek_44 (E), DrDrey_44 (E), EleanorGeorge_87 (F1), Elph10_43 (E), Fajezeel_62 (A1), FeliMaine_11 (S), Filch_44 (E), Flathead_79 (F1), Froghopper_59 (A1), Fruitloop_76 (F1), Galactic_79 (F1), Greg_62 (A1), Grimmer_91 (F1), HanKaySha_43 (E), Hopey_44 (E), Huphlepuff_11 (S), Jabbawokkie_90 (F2), JeTaime_44 (E), JoieB_11 (S), Latretium_80 (F1), Lesedi_57 (A1), LilMoolah_80 (F1), Lilac_46 (E), Lilbit_11 (S), Lilizi_43 (E), LittleLaf_10 (S), MadamMonkfish_42 (E), Mahavrat_77 (F1), Martik_82 (F1), Maxxinista_45 (E), Miniwave_41 (E), Moldemort_42 (E), Mosby_40 (E), MrGordo_62 (A1), Murphy_45 (E), Nivrat_78 (F1), NoSleep_45 (E), OrionPax_43 (E), Phatniss_83 (F1), Phrux_42 (E), Pringar_10 (S), Pumpkin_45 (E), Rimmer_42 (E), RiverMonster_44 (E), SG4_79 (F1), ShereKhan_42 (E), ShowerHandel_83 (F1), Stark_45 (E), StormChicken_43 (E), TeardropMSU_40 (E), Thresher_46 (E), Tomaszewski_40 (E), Xandras_43 (E), Youngblood_43 (E), Zapner_89 (F2),

Start 49:

- Found in 1 of 136 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juniormint_57 (P1),

Start 52:

- Found in 44 of 136 (32.4%) of genes in pham
- Manual Annotations of this start: 38 of 128
- Called 93.2% of time when present
- Phage (with cluster) where this start called: Ariel_72 (J), Atcoo_54 (P1), Avani_91 (F2), Beem_72 (J), Brusacoram_54 (P1), CaptainTrips_82 (F1), Dallas_71 (J), DmpstrDiver_72 (J), Ejimix_72 (J), Estave1_94 (F1), FairyPath_41 (E), GreaseLightnin_58 (P1), Halley_74 (J), HokkenD_65 (J), Hughesyang_71 (J), JuicyJay_71 (J), Kalah2_67 (J), Klein_72 (J), Latretium_83 (F1), Lucky2013_70 (J), Marleymoo_66 (J), Marvin_9 (S), MiaZeal_73 (J), Minerva_78 (J), MinionDave_78 (F1), NihilNomen_73 (J), Odette_71 (J), Phoebus_75 (J), Porcelain_72 (J), Quallification_42 (E), Redno2_69 (J), Schatzie_67 (J), Squint_73 (J), StevieRay_57 (P1), Superphikiman_70 (J), Thespis_54 (P1), ThreeRngTarjay_70 (J), VRedHorse_87 (F1), Wanda_76 (J), Yoshi_97 (F2), Zelink_70 (J),

Start 53:

- Found in 4 of 136 (2.9%) of genes in pham
- Manual Annotations of this start: 2 of 128
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Dante_84 (F1), Latretium_87 (F1),

Start 64:

- Found in 5 of 136 (3.7%) of genes in pham
- Manual Annotations of this start: 5 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Che8_94 (F1), Constella_63 (J), Marker_83 (F1), Ovechkin_83 (F1), STLscum_68 (A1),

Start 70:

- Found in 1 of 136 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 128
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Frankie_90 (F1),

Start 72:

- Found in 19 of 136 (14.0%) of genes in pham
- Manual Annotations of this start: 8 of 128
- Called 42.1% of time when present
- Phage (with cluster) where this start called: BPBiabs31_63 (A1), Blackbeetle_10 (S), Maroc7_58 (A1), Poise_10 (S), Raela_10 (S), SG4_82 (F1), Solon_59 (A1), Tesla_10 (S),

Summary by clusters:

There are 10 clusters represented in this pham: P2, F1, F2, P1, E, F, J, A1, S, W,

Info for manual annotations of cluster A1:

- Start number 48 was manually annotated 8 times for cluster A1.
- Start number 64 was manually annotated 1 time for cluster A1.
- Start number 72 was manually annotated 3 times for cluster A1.

Info for manual annotations of cluster E:

- Start number 48 was manually annotated 34 times for cluster E.
- Start number 52 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster F1:

- Start number 34 was manually annotated 1 time for cluster F1.
- Start number 38 was manually annotated 1 time for cluster F1.
- Start number 48 was manually annotated 14 times for cluster F1.
- Start number 52 was manually annotated 5 times for cluster F1.
- Start number 53 was manually annotated 2 times for cluster F1.
- Start number 64 was manually annotated 3 times for cluster F1.
- Start number 70 was manually annotated 1 time for cluster F1.
- Start number 72 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 29 was manually annotated 1 time for cluster F2.
- Start number 34 was manually annotated 1 time for cluster F2.
- Start number 48 was manually annotated 2 times for cluster F2.
- Start number 52 was manually annotated 2 times for cluster F2.

Info for manual annotations of cluster J:

- Start number 52 was manually annotated 24 times for cluster J.
- Start number 64 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster P1:

- Start number 49 was manually annotated 1 time for cluster P1.
- Start number 52 was manually annotated 5 times for cluster P1.

Info for manual annotations of cluster P2:

- Start number 33 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster S:

- Start number 44 was manually annotated 1 time for cluster S.
- Start number 48 was manually annotated 8 times for cluster S.
- Start number 52 was manually annotated 1 time for cluster S.
- Start number 72 was manually annotated 4 times for cluster S.

Info for manual annotations of cluster W:

- Start number 29 was manually annotated 1 time for cluster W.

Gene Information:

Gene: 244_45 Start: 35533, Stop: 35168, Start Num: 48

Candidate Starts for 244_45:

(43, 35548), (Start: 48 @35533 has 66 MA's), (77, 35398), (85, 35374), (89, 35350), (100, 35305), (102, 35287),

Gene: Acme_63 Start: 41329, Stop: 40964, Start Num: 48

Candidate Starts for Acme_63:

(9, 41530), (26, 41386), (27, 41383), (Start: 48 @41329 has 66 MA's), (71, 41212), (77, 41194), (85, 41170), (89, 41146), (100, 41101),

Gene: AmericanBeauty_43 Start: 35021, Stop: 34656, Start Num: 48

Candidate Starts for AmericanBeauty_43:

(30, 35060), (Start: 38 @35042 has 1 MA's), (Start: 48 @35021 has 66 MA's), (77, 34886), (85, 34862), (89, 34838), (100, 34793), (102, 34775),

Gene: Argie_65 Start: 48661, Stop: 49026, Start Num: 29

Candidate Starts for Argie_65:

(12, 48544), (13, 48574), (15, 48601), (23, 48637), (Start: 29 @48661 has 2 MA's), (58, 48766), (75, 48814), (83, 48832), (84, 48838), (98, 48895), (99, 48904), (109, 48976), (111, 49000), (113, 49015),

Gene: Ariel_72 Start: 46298, Stop: 45933, Start Num: 52

Candidate Starts for Ariel_72:

(Start: 52 @46298 has 38 MA's), (59, 46256), (86, 46160), (100, 46091), (104, 46052),

Gene: Atcoo_54 Start: 36879, Stop: 37241, Start Num: 52

Candidate Starts for Atcoo_54:

(7, 36651), (25, 36798), (Start: 33 @36822 has 1 MA's), (Start: 52 @36879 has 38 MA's), (Start: 72 @36954 has 8 MA's), (78, 36969), (86, 36996), (87, 37002), (97, 37047), (99, 37059), (118, 37218),

Gene: Avani_88 Start: 46792, Stop: 47127, Start Num: 34

Candidate Starts for Avani_88:

(24, 46759), (Start: 34 @46792 has 2 MA's), (39, 46804), (Start: 53 @46852 has 2 MA's), (73, 46927), (81, 46936), (97, 46984), (99, 46996),

Gene: Avani_91 Start: 47610, Stop: 47966, Start Num: 52

Candidate Starts for Avani_91:

(Start: 52 @47610 has 38 MA's), (107, 47862),

Gene: BPBiEbs31_63 Start: 41560, Stop: 41312, Start Num: 72
Candidate Starts for BPBiEbs31_63:
(23, 41761), (59, 41617), (61, 41614), (Start: 72 @41560 has 8 MA's), (88, 41512), (99, 41452),

Gene: Beelzebub_13 Start: 3753, Stop: 4160, Start Num: 48
Candidate Starts for Beelzebub_13:
(Start: 48 @3753 has 66 MA's), (51, 3765), (77, 3891), (85, 3915), (89, 3939), (98, 3972), (118, 4137),

Gene: Beem_72 Start: 50575, Stop: 50210, Start Num: 52
Candidate Starts for Beem_72:
(Start: 52 @50575 has 38 MA's), (59, 50533), (86, 50437), (100, 50368), (104, 50329),

Gene: Big3_61 Start: 41706, Stop: 41350, Start Num: 48
Candidate Starts for Big3_61:
(28, 41754), (37, 41736), (Start: 48 @41706 has 66 MA's), (51, 41694), (77, 41568), (79, 41559), (85, 41544), (89, 41520), (97, 41490), (99, 41478),

Gene: Blackbeetle_10 Start: 3064, Stop: 3315, Start Num: 72
Candidate Starts for Blackbeetle_10:
(Start: 72 @3064 has 8 MA's), (88, 3112), (99, 3172), (100, 3175), (102, 3193),

Gene: Blarby_90 Start: 47520, Stop: 47888, Start Num: 48
Candidate Starts for Blarby_90:
(30, 47484), (Start: 48 @47520 has 66 MA's), (77, 47655), (85, 47679), (89, 47703), (100, 47748), (102, 47766), (110, 47814),

Gene: Brusacoram_54 Start: 36385, Stop: 36747, Start Num: 52
Candidate Starts for Brusacoram_54:
(7, 36157), (25, 36304), (Start: 33 @36328 has 1 MA's), (Start: 52 @36385 has 38 MA's), (Start: 72 @36460 has 8 MA's), (78, 36475), (86, 36502), (87, 36508), (97, 36553), (99, 36565), (118, 36724),

Gene: Buck_42 Start: 35321, Stop: 34953, Start Num: 48
Candidate Starts for Buck_42:
(Start: 48 @35321 has 66 MA's), (51, 35309), (77, 35183), (85, 35159), (89, 35135), (102, 35072),

Gene: Bxb1_55 Start: 39572, Stop: 39207, Start Num: 48
Candidate Starts for Bxb1_55:
(9, 39773), (26, 39629), (27, 39626), (Start: 48 @39572 has 66 MA's), (71, 39455), (77, 39437), (85, 39413), (89, 39389), (100, 39344),

Gene: ByChance_74 Start: 45038, Stop: 45421, Start Num: 48
Candidate Starts for ByChance_74:
(Start: 48 @45038 has 66 MA's), (50, 45047), (Start: 72 @45149 has 8 MA's), (74, 45158), (97, 45230), (99, 45242), (115, 45368),

Gene: CaptainTrips_82 Start: 48768, Stop: 49100, Start Num: 52
Candidate Starts for CaptainTrips_82:
(Start: 52 @48768 has 38 MA's), (59, 48810), (86, 48906), (98, 48963),

Gene: Che8_85 Start: 49488, Stop: 49877, Start Num: 48
Candidate Starts for Che8_85:
(31, 49449), (Start: 48 @49488 has 66 MA's), (51, 49500), (63, 49572), (66, 49581), (76, 49617), (98, 49689),

Gene: Che8_94 Start: 51968, Stop: 52192, Start Num: 64

Candidate Starts for Che8_94:

(Start: 64 @51968 has 5 MA's), (90, 52028), (92, 52031), (99, 52064),

Gene: Che9d_92 Start: 49021, Stop: 49440, Start Num: 29

Candidate Starts for Che9d_92:

(Start: 29 @49021 has 2 MA's), (58, 49126), (75, 49174), (83, 49192), (84, 49198), (99, 49264),

Gene: Cjw1_44 Start: 36482, Stop: 36078, Start Num: 48

Candidate Starts for Cjw1_44:

(Start: 48 @36482 has 66 MA's), (77, 36347), (85, 36323), (89, 36299), (100, 36254), (115, 36131),

Gene: Clarkson_11 Start: 3529, Stop: 3936, Start Num: 48

Candidate Starts for Clarkson_11:

(Start: 48 @3529 has 66 MA's), (51, 3541), (77, 3667), (85, 3691), (89, 3715), (98, 3748), (118, 3913),

Gene: Constella_63 Start: 45933, Stop: 45571, Start Num: 64

Candidate Starts for Constella_63:

(Start: 64 @45933 has 5 MA's), (90, 45873), (92, 45870), (99, 45837), (119, 45663),

Gene: Contagion_41 Start: 34707, Stop: 34342, Start Num: 48

Candidate Starts for Contagion_41:

(43, 34722), (Start: 48 @34707 has 66 MA's), (77, 34572), (85, 34548), (89, 34524), (102, 34461),

Gene: Cookies_41 Start: 35072, Stop: 34707, Start Num: 48

Candidate Starts for Cookies_41:

(43, 35087), (Start: 48 @35072 has 66 MA's), (77, 34937), (85, 34913), (89, 34889), (102, 34826),

Gene: Corazon_10 Start: 3482, Stop: 3889, Start Num: 48

Candidate Starts for Corazon_10:

(Start: 48 @3482 has 66 MA's), (51, 3494), (77, 3620), (85, 3644), (89, 3668), (98, 3701), (118, 3866),

Gene: Czyszczone1_44 Start: 35291, Stop: 34887, Start Num: 48

Candidate Starts for Czyszczone1_44:

(Start: 48 @35291 has 66 MA's), (77, 35156), (85, 35132), (89, 35108), (100, 35063), (115, 34940),

Gene: Dallas_71 Start: 49496, Stop: 49131, Start Num: 52

Candidate Starts for Dallas_71:

(Start: 52 @49496 has 38 MA's), (59, 49454), (86, 49358), (100, 49289), (104, 49250),

Gene: Dante_84 Start: 51687, Stop: 51980, Start Num: 53

Candidate Starts for Dante_84:

(Start: 38 @51639 has 1 MA's), (42, 51645), (Start: 53 @51687 has 2 MA's), (95, 51831), (101, 51864),

Gene: DmpstrDiver_72 Start: 49923, Stop: 49558, Start Num: 52

Candidate Starts for DmpstrDiver_72:

(Start: 52 @49923 has 38 MA's), (59, 49881), (86, 49785), (100, 49716), (104, 49677),

Gene: DrDrey_44 Start: 36335, Stop: 35970, Start Num: 48

Candidate Starts for DrDrey_44:

(43, 36350), (Start: 48 @36335 has 66 MA's), (77, 36200), (85, 36176), (89, 36152), (100, 36107), (102, 36089),

Gene: Ejimix_72 Start: 51361, Stop: 50996, Start Num: 52

Candidate Starts for Ejimix_72:

(Start: 52 @51361 has 38 MA's), (59, 51319), (86, 51223), (100, 51154), (104, 51115),

Gene: EleanorGeorge_87 Start: 51109, Stop: 51492, Start Num: 48

Candidate Starts for EleanorGeorge_87:

(36, 51076), (Start: 48 @51109 has 66 MA's), (Start: 72 @51220 has 8 MA's), (74, 51229), (97, 51301), (99, 51313), (115, 51439),

Gene: Elph10_43 Start: 34783, Stop: 34379, Start Num: 48

Candidate Starts for Elph10_43:

(Start: 48 @34783 has 66 MA's), (77, 34648), (85, 34624), (89, 34600), (100, 34555), (115, 34432),

Gene: Estave1_94 Start: 53968, Stop: 54324, Start Num: 52

Candidate Starts for Estave1_94:

(Start: 52 @53968 has 38 MA's), (107, 54220),

Gene: FairyPath_41 Start: 35211, Stop: 34846, Start Num: 52

Candidate Starts for FairyPath_41:

(Start: 52 @35211 has 38 MA's), (59, 35169), (86, 35073), (100, 35004), (104, 34965),

Gene: Fajezeel_62 Start: 40619, Stop: 40254, Start Num: 48

Candidate Starts for Fajezeel_62:

(9, 40820), (26, 40676), (27, 40673), (Start: 48 @40619 has 66 MA's), (71, 40502), (77, 40484), (85, 40460), (89, 40436), (100, 40391),

Gene: FeliMaine_11 Start: 3530, Stop: 3937, Start Num: 48

Candidate Starts for FeliMaine_11:

(Start: 48 @3530 has 66 MA's), (51, 3542), (77, 3668), (85, 3692), (89, 3716), (98, 3749), (118, 3914),

Gene: Filch_44 Start: 35012, Stop: 34647, Start Num: 48

Candidate Starts for Filch_44:

(Start: 48 @35012 has 66 MA's), (77, 34877), (85, 34853), (89, 34829), (102, 34766),

Gene: Flathead_79 Start: 48157, Stop: 48534, Start Num: 48

Candidate Starts for Flathead_79:

(47, 48154), (Start: 48 @48157 has 66 MA's), (57, 48199), (77, 48304), (85, 48328), (89, 48352), (102, 48415),

Gene: Frankie_90 Start: 50801, Stop: 51076, Start Num: 70

Candidate Starts for Frankie_90:

(60, 50762), (Start: 70 @50801 has 1 MA's), (91, 50861), (93, 50864), (99, 50897), (115, 51023),

Gene: Froghopper_59 Start: 39967, Stop: 39602, Start Num: 48

Candidate Starts for Froghopper_59:

(9, 40168), (26, 40024), (27, 40021), (Start: 48 @39967 has 66 MA's), (71, 39850), (77, 39832), (85, 39808), (89, 39784), (100, 39739),

Gene: Fruitloop_76 Start: 48252, Stop: 48602, Start Num: 48

Candidate Starts for Fruitloop_76:

(30, 48216), (Start: 48 @48252 has 66 MA's), (77, 48387), (85, 48411), (89, 48435), (98, 48468),

Gene: Galactic_79 Start: 48078, Stop: 48443, Start Num: 48

Candidate Starts for Galactic_79:

(1, 47778), (2, 47787), (3, 47793), (4, 47802), (5, 47832), (30, 48042), (Start: 48 @48078 has 66 MA's), (77, 48213), (85, 48237), (89, 48261), (100, 48306), (102, 48324),

Gene: GreaseLightnin_58 Start: 38269, Stop: 38631, Start Num: 52

Candidate Starts for GreaseLightnin_58:

(6, 38008), (8, 38041), (10, 38065), (11, 38071), (Start: 33 @38212 has 1 MA's), (Start: 52 @38269 has 38 MA's), (Start: 72 @38344 has 8 MA's), (78, 38359), (86, 38386), (87, 38392), (97, 38437), (99, 38449), (118, 38608),

Gene: Greg_62 Start: 40619, Stop: 40254, Start Num: 48

Candidate Starts for Greg_62:

(9, 40820), (26, 40676), (27, 40673), (Start: 48 @40619 has 66 MA's), (71, 40502), (77, 40484), (85, 40460), (89, 40436), (100, 40391),

Gene: Grimmer_91 Start: 49019, Stop: 49426, Start Num: 48

Candidate Starts for Grimmer_91:

(Start: 48 @49019 has 66 MA's), (51, 49031), (Start: 52 @49040 has 38 MA's), (77, 49157), (85, 49181), (89, 49205), (98, 49238), (105, 49310),

Gene: Halley_74 Start: 50575, Stop: 50210, Start Num: 52

Candidate Starts for Halley_74:

(Start: 52 @50575 has 38 MA's), (59, 50533), (86, 50437), (100, 50368), (104, 50329),

Gene: HanKaySha_43 Start: 34995, Stop: 34630, Start Num: 48

Candidate Starts for HanKaySha_43:

(43, 35010), (Start: 48 @34995 has 66 MA's), (77, 34860), (85, 34836), (89, 34812), (100, 34767), (102, 34749),

Gene: HokkenD_65 Start: 48844, Stop: 48479, Start Num: 52

Candidate Starts for HokkenD_65:

(Start: 52 @48844 has 38 MA's), (59, 48802), (86, 48706), (100, 48637), (104, 48598),

Gene: Hopey_44 Start: 35530, Stop: 35165, Start Num: 48

Candidate Starts for Hopey_44:

(43, 35545), (Start: 48 @35530 has 66 MA's), (77, 35395), (85, 35371), (89, 35347), (100, 35302), (102, 35284),

Gene: Hughesyang_71 Start: 50504, Stop: 50139, Start Num: 52

Candidate Starts for Hughesyang_71:

(Start: 52 @50504 has 38 MA's), (59, 50462), (86, 50366), (100, 50297), (104, 50258),

Gene: Huphlebuff_11 Start: 3259, Stop: 3666, Start Num: 48

Candidate Starts for Huphlebuff_11:

(Start: 48 @3259 has 66 MA's), (51, 3271), (77, 3397), (85, 3421), (89, 3445), (98, 3478), (118, 3643),

Gene: Jabbawokkie_90 Start: 47440, Stop: 47808, Start Num: 48

Candidate Starts for Jabbawokkie_90:

(30, 47404), (Start: 48 @47440 has 66 MA's), (77, 47575), (85, 47599), (89, 47623), (100, 47668), (102, 47686), (110, 47734),

Gene: JeTaime_44 Start: 36054, Stop: 35689, Start Num: 48

Candidate Starts for JeTaime_44:

(Start: 48 @36054 has 66 MA's), (77, 35919), (85, 35895), (89, 35871), (102, 35808),

Gene: JoieB_11 Start: 3478, Stop: 3885, Start Num: 48

Candidate Starts for JoieB_11:

(Start: 48 @3478 has 66 MA's), (51, 3490), (77, 3616), (85, 3640), (89, 3664), (98, 3697), (118, 3862),

Gene: JuicyJay_71 Start: 51709, Stop: 51344, Start Num: 52

Candidate Starts for JuicyJay_71:

(Start: 52 @51709 has 38 MA's), (59, 51667), (86, 51571), (100, 51502), (104, 51463),

Gene: Juniormint_57 Start: 37791, Stop: 38165, Start Num: 49

Candidate Starts for Juniormint_57:

(Start: 49 @37791 has 1 MA's), (Start: 72 @37878 has 8 MA's), (78, 37893), (86, 37920), (87, 37926), (97, 37971), (99, 37983), (118, 38142),

Gene: Kalah2_67 Start: 49868, Stop: 49503, Start Num: 52

Candidate Starts for Kalah2_67:

(Start: 52 @49868 has 38 MA's), (59, 49826), (86, 49730), (100, 49661), (104, 49622),

Gene: Klein_72 Start: 49891, Stop: 49526, Start Num: 52

Candidate Starts for Klein_72:

(Start: 52 @49891 has 38 MA's), (59, 49849), (86, 49753), (100, 49684), (104, 49645),

Gene: Latretium_80 Start: 47741, Stop: 48100, Start Num: 48

Candidate Starts for Latretium_80:

(Start: 48 @47741 has 66 MA's), (77, 47879), (79, 47888), (85, 47903), (89, 47927), (97, 47957), (99, 47969),

Gene: Latretium_87 Start: 49978, Stop: 50271, Start Num: 53

Candidate Starts for Latretium_87:

(Start: 38 @49930 has 1 MA's), (42, 49936), (Start: 53 @49978 has 2 MA's), (95, 50122), (101, 50155),

Gene: Latretium_83 Start: 48583, Stop: 48948, Start Num: 52

Candidate Starts for Latretium_83:

(Start: 52 @48583 has 38 MA's), (59, 48625), (86, 48721), (100, 48790), (104, 48829),

Gene: Lesedi_57 Start: 39252, Stop: 38887, Start Num: 48

Candidate Starts for Lesedi_57:

(9, 39453), (26, 39309), (27, 39306), (Start: 48 @39252 has 66 MA's), (71, 39135), (77, 39117), (85, 39093), (89, 39069), (100, 39024),

Gene: LilMoolah_80 Start: 49043, Stop: 49381, Start Num: 48

Candidate Starts for LilMoolah_80:

(31, 49004), (Start: 48 @49043 has 66 MA's), (51, 49055), (63, 49127), (66, 49136), (76, 49172), (98, 49244),

Gene: Lilac_46 Start: 35189, Stop: 34785, Start Num: 48

Candidate Starts for Lilac_46:

(Start: 48 @35189 has 66 MA's), (77, 35054), (85, 35030), (89, 35006), (100, 34961), (115, 34838),

Gene: Lilbit_11 Start: 3530, Stop: 3937, Start Num: 48

Candidate Starts for Lilbit_11:

(Start: 48 @3530 has 66 MA's), (51, 3542), (77, 3668), (85, 3692), (89, 3716), (98, 3749), (118, 3914),

Gene: Lilizi_43 Start: 34863, Stop: 34459, Start Num: 48

Candidate Starts for Lilizi_43:

(Start: 48 @34863 has 66 MA's), (77, 34728), (85, 34704), (89, 34680), (100, 34635), (115, 34512),

Gene: LittleLaf_10 Start: 3259, Stop: 3666, Start Num: 48

Candidate Starts for LittleLaf_10:

(Start: 48 @3259 has 66 MA's), (51, 3271), (77, 3397), (85, 3421), (89, 3445), (98, 3478), (118, 3643),

Gene: Lucky2013_70 Start: 46314, Stop: 45949, Start Num: 52

Candidate Starts for Lucky2013_70:

(Start: 52 @46314 has 38 MA's), (59, 46272), (86, 46176), (100, 46107), (104, 46068),

Gene: LunaBlu_89 Start: 51072, Stop: 51413, Start Num: 38

Candidate Starts for LunaBlu_89:

(Start: 38 @51072 has 1 MA's), (42, 51078), (Start: 53 @51120 has 2 MA's), (95, 51264), (101, 51297),

Gene: MadamMonkfish_42 Start: 34547, Stop: 34182, Start Num: 48

Candidate Starts for MadamMonkfish_42:

(30, 34586), (Start: 38 @34568 has 1 MA's), (Start: 48 @34547 has 66 MA's), (77, 34412), (85, 34388), (89, 34364), (100, 34319), (102, 34301),

Gene: Mahavrat_77 Start: 46587, Stop: 46994, Start Num: 48

Candidate Starts for Mahavrat_77:

(Start: 48 @46587 has 66 MA's), (51, 46599), (Start: 52 @46608 has 38 MA's), (77, 46725), (85, 46749), (89, 46773), (98, 46806), (105, 46878),

Gene: Marker_83 Start: 48420, Stop: 48782, Start Num: 64

Candidate Starts for Marker_83:

(Start: 64 @48420 has 5 MA's), (90, 48480), (92, 48483), (99, 48516), (119, 48690),

Gene: Marleymoo_66 Start: 48687, Stop: 48322, Start Num: 52

Candidate Starts for Marleymoo_66:

(25, 48771), (Start: 52 @48687 has 38 MA's), (59, 48645), (86, 48549), (100, 48480), (104, 48441),

Gene: Maroc7_58 Start: 41045, Stop: 40797, Start Num: 72

Candidate Starts for Maroc7_58:

(20, 41255), (23, 41246), (59, 41102), (61, 41099), (Start: 72 @41045 has 8 MA's), (88, 40997), (99, 40937),

Gene: Martik_82 Start: 51049, Stop: 51432, Start Num: 48

Candidate Starts for Martik_82:

(18, 50959), (22, 50974), (36, 51016), (Start: 48 @51049 has 66 MA's), (Start: 72 @51160 has 8 MA's), (74, 51169), (97, 51241), (99, 51253), (115, 51379),

Gene: Marvin_9 Start: 3241, Stop: 3600, Start Num: 52

Candidate Starts for Marvin_9:

(Start: 52 @3241 has 38 MA's), (55, 3253), (Start: 72 @3316 has 8 MA's), (78, 3331), (86, 3358), (87, 3364), (97, 3409), (99, 3421),

Gene: Maxxinista_45 Start: 35159, Stop: 34755, Start Num: 48

Candidate Starts for Maxxinista_45:

(Start: 48 @35159 has 66 MA's), (77, 35024), (85, 35000), (89, 34976), (100, 34931), (115, 34808),

Gene: MiaZeal_73 Start: 46970, Stop: 46605, Start Num: 52

Candidate Starts for MiaZeal_73:

(Start: 52 @46970 has 38 MA's), (59, 46928), (86, 46832), (100, 46763), (104, 46724),

Gene: Minerva_78 Start: 51991, Stop: 51626, Start Num: 52

Candidate Starts for Minerva_78:

(Start: 52 @51991 has 38 MA's), (59, 51949), (86, 51853), (100, 51784), (104, 51745),

Gene: MinionDave_78 Start: 48768, Stop: 49100, Start Num: 52

Candidate Starts for MinionDave_78:

(Start: 52 @48768 has 38 MA's), (59, 48810), (86, 48906), (98, 48963),

Gene: Miniwave_41 Start: 35246, Stop: 34860, Start Num: 48

Candidate Starts for Miniwave_41:

(43, 35261), (Start: 48 @35246 has 66 MA's), (77, 35111), (85, 35087), (89, 35063), (100, 35018), (104, 34979),

Gene: Moldemort_42 Start: 34776, Stop: 34411, Start Num: 48

Candidate Starts for Moldemort_42:

(30, 34815), (Start: 38 @34797 has 1 MA's), (Start: 48 @34776 has 66 MA's), (77, 34641), (85, 34617), (89, 34593), (100, 34548), (102, 34530),

Gene: Mosby_40 Start: 34707, Stop: 34342, Start Num: 48

Candidate Starts for Mosby_40:

(43, 34722), (Start: 48 @34707 has 66 MA's), (77, 34572), (85, 34548), (89, 34524), (102, 34461),

Gene: MrGordo_62 Start: 40946, Stop: 40590, Start Num: 48

Candidate Starts for MrGordo_62:

(Start: 48 @40946 has 66 MA's), (51, 40934), (77, 40808), (79, 40799), (85, 40784), (89, 40760), (97, 40730), (99, 40718),

Gene: Murphy_45 Start: 35671, Stop: 35267, Start Num: 48

Candidate Starts for Murphy_45:

(Start: 48 @35671 has 66 MA's), (77, 35536), (85, 35512), (89, 35488), (100, 35443), (115, 35320),

Gene: NihilNomen_73 Start: 50662, Stop: 50297, Start Num: 52

Candidate Starts for NihilNomen_73:

(Start: 52 @50662 has 38 MA's), (59, 50620), (86, 50524), (100, 50455), (104, 50416),

Gene: Nivrat_78 Start: 48916, Stop: 49254, Start Num: 48

Candidate Starts for Nivrat_78:

(31, 48877), (Start: 48 @48916 has 66 MA's), (51, 48928), (63, 49000), (66, 49009), (76, 49045), (98, 49117),

Gene: NoSleep_45 Start: 35431, Stop: 35027, Start Num: 48

Candidate Starts for NoSleep_45:

(Start: 48 @35431 has 66 MA's), (77, 35296), (85, 35272), (89, 35248), (100, 35203), (115, 35080),

Gene: Odette_71 Start: 49705, Stop: 49340, Start Num: 52

Candidate Starts for Odette_71:

(Start: 52 @49705 has 38 MA's), (59, 49663), (86, 49567), (100, 49498), (104, 49459),

Gene: OrionPax_43 Start: 35001, Stop: 34636, Start Num: 48

Candidate Starts for OrionPax_43:

(Start: 48 @35001 has 66 MA's), (77, 34866), (85, 34842), (89, 34818), (102, 34755),

Gene: Ovechkin_83 Start: 49406, Stop: 49663, Start Num: 64

Candidate Starts for Ovechkin_83:

(Start: 64 @49406 has 5 MA's), (90, 49466), (92, 49469), (99, 49502), (108, 49574), (114, 49616), (117, 49643),

Gene: Phatniss_83 Start: 49365, Stop: 49781, Start Num: 48

Candidate Starts for Phatniss_83:

(Start: 48 @49365 has 66 MA's), (63, 49449), (66, 49458), (76, 49494), (97, 49563), (99, 49575), (103, 49608), (112, 49707),

Gene: Phoebus_75 Start: 51844, Stop: 51479, Start Num: 52

Candidate Starts for Phoebus_75:

(Start: 52 @51844 has 38 MA's), (59, 51802), (86, 51706), (100, 51637), (104, 51598),

Gene: Phrux_42 Start: 34994, Stop: 34629, Start Num: 48

Candidate Starts for Phrux_42:

(43, 35009), (Start: 48 @34994 has 66 MA's), (77, 34859), (85, 34835), (89, 34811), (100, 34766), (102, 34748),

Gene: Poise_10 Start: 3064, Stop: 3315, Start Num: 72

Candidate Starts for Poise_10:

(Start: 72 @3064 has 8 MA's), (88, 3112), (99, 3172), (100, 3175), (102, 3193),

Gene: Porcelain_72 Start: 46970, Stop: 46605, Start Num: 52

Candidate Starts for Porcelain_72:

(Start: 52 @46970 has 38 MA's), (59, 46928), (86, 46832), (100, 46763), (104, 46724),

Gene: Pringar_10 Start: 3084, Stop: 3491, Start Num: 48

Candidate Starts for Pringar_10:

(Start: 48 @3084 has 66 MA's), (51, 3096), (77, 3222), (85, 3246), (89, 3270), (98, 3303), (118, 3468),

Gene: Pumpkin_45 Start: 35920, Stop: 35555, Start Num: 48

Candidate Starts for Pumpkin_45:

(Start: 48 @35920 has 66 MA's), (77, 35785), (85, 35761), (89, 35737), (102, 35674),

Gene: Quallification_42 Start: 35222, Stop: 34857, Start Num: 52

Candidate Starts for Quallification_42:

(Start: 52 @35222 has 38 MA's), (59, 35180), (86, 35084), (100, 35015), (104, 34976),

Gene: Raela_10 Start: 3468, Stop: 3719, Start Num: 72

Candidate Starts for Raela_10:

(Start: 72 @3468 has 8 MA's), (88, 3516), (99, 3576), (100, 3579), (102, 3597),

Gene: Rearden_72 Start: 47623, Stop: 47135, Start Num: 16

Candidate Starts for Rearden_72:

(13, 47662), (16, 47623), (19, 47611), (41, 47548), (46, 47533), (Start: 52 @47506 has 38 MA's), (54, 47500), (62, 47455), (65, 47443), (80, 47392), (82, 47389), (91, 47359), (99, 47317), (115, 47191),

Gene: RedRaider77_11 Start: 3531, Stop: 3950, Start Num: 44
Candidate Starts for RedRaider77_11:
(Start: 44 @3531 has 1 MA's), (77, 3681), (85, 3705), (89, 3729), (96, 3756), (97, 3759),

Gene: Redno2_69 Start: 47458, Stop: 47093, Start Num: 52
Candidate Starts for Redno2_69:
(Start: 52 @47458 has 38 MA's), (59, 47416), (86, 47320), (100, 47251), (104, 47212),

Gene: Rimmer_42 Start: 34931, Stop: 34563, Start Num: 48
Candidate Starts for Rimmer_42:
(Start: 48 @34931 has 66 MA's), (51, 34919), (77, 34793), (85, 34769), (89, 34745), (102, 34682),

Gene: RiverMonster_44 Start: 35447, Stop: 35043, Start Num: 48
Candidate Starts for RiverMonster_44:
(Start: 48 @35447 has 66 MA's), (77, 35312), (85, 35288), (89, 35264), (100, 35219), (115, 35096),

Gene: SG4_82 Start: 49730, Stop: 49978, Start Num: 72
Candidate Starts for SG4_82:
(Start: 72 @49730 has 8 MA's), (88, 49778), (99, 49838), (100, 49841), (102, 49859),

Gene: SG4_79 Start: 48739, Stop: 49107, Start Num: 48
Candidate Starts for SG4_79:
(32, 48706), (Start: 48 @48739 has 66 MA's), (77, 48877), (79, 48886), (85, 48901), (89, 48925), (102, 48988),

Gene: STLscum_68 Start: 42547, Stop: 42314, Start Num: 64
Candidate Starts for STLscum_68:
(Start: 64 @42547 has 5 MA's), (67, 42538), (92, 42475), (94, 42469), (98, 42451),

Gene: Schatzie_67 Start: 49452, Stop: 49087, Start Num: 52
Candidate Starts for Schatzie_67:
(Start: 52 @49452 has 38 MA's), (59, 49410), (86, 49314), (100, 49245), (104, 49206),

Gene: ShereKhan_42 Start: 35964, Stop: 35599, Start Num: 48
Candidate Starts for ShereKhan_42:
(43, 35979), (Start: 48 @35964 has 66 MA's), (77, 35829), (85, 35805), (89, 35781), (100, 35736), (102, 35718),

Gene: ShowerHandel_83 Start: 48976, Stop: 49359, Start Num: 48
Candidate Starts for ShowerHandel_83:
(Start: 48 @48976 has 66 MA's), (50, 48985), (Start: 72 @49087 has 8 MA's), (74, 49096), (97, 49168), (99, 49180), (115, 49306),

Gene: Solon_59 Start: 40107, Stop: 39859, Start Num: 72
Candidate Starts for Solon_59:
(Start: 72 @40107 has 8 MA's), (88, 40059), (100, 39996), (102, 39978),

Gene: Squint_73 Start: 47089, Stop: 46724, Start Num: 52
Candidate Starts for Squint_73:
(Start: 52 @47089 has 38 MA's), (59, 47047), (86, 46951), (100, 46882), (104, 46843),

Gene: Stark_45 Start: 35450, Stop: 35046, Start Num: 48
Candidate Starts for Stark_45:

(43, 35465), (Start: 48 @35450 has 66 MA's), (77, 35315), (85, 35291), (89, 35267), (100, 35222), (115, 35099),

Gene: StevieRay_57 Start: 37992, Stop: 38351, Start Num: 52

Candidate Starts for StevieRay_57:

(6, 37731), (8, 37764), (10, 37788), (11, 37794), (Start: 33 @37935 has 1 MA's), (Start: 52 @37992 has 38 MA's), (Start: 72 @38067 has 8 MA's), (78, 38082), (86, 38109), (87, 38115), (97, 38160), (99, 38172), (118, 38328),

Gene: StormChicken_43 Start: 35539, Stop: 35171, Start Num: 48

Candidate Starts for StormChicken_43:

(Start: 48 @35539 has 66 MA's), (51, 35527), (77, 35401), (85, 35377), (89, 35353), (102, 35290),

Gene: Superphikiman_70 Start: 46180, Stop: 45815, Start Num: 52

Candidate Starts for Superphikiman_70:

(Start: 52 @46180 has 38 MA's), (59, 46138), (86, 46042), (100, 45973), (104, 45934),

Gene: TeardropMSU_40 Start: 34933, Stop: 34568, Start Num: 48

Candidate Starts for TeardropMSU_40:

(43, 34948), (Start: 48 @34933 has 66 MA's), (77, 34798), (85, 34774), (89, 34750), (102, 34687),

Gene: Tesla_10 Start: 3055, Stop: 3306, Start Num: 72

Candidate Starts for Tesla_10:

(Start: 72 @3055 has 8 MA's), (88, 3103), (99, 3163), (100, 3166), (102, 3184),

Gene: Thespis_54 Start: 36385, Stop: 36747, Start Num: 52

Candidate Starts for Thespis_54:

(7, 36157), (25, 36304), (Start: 33 @36328 has 1 MA's), (Start: 52 @36385 has 38 MA's), (Start: 72 @36460 has 8 MA's), (78, 36475), (86, 36502), (87, 36508), (97, 36553), (99, 36565), (118, 36724),

Gene: ThreeRngTarjay_70 Start: 50738, Stop: 50373, Start Num: 52

Candidate Starts for ThreeRngTarjay_70:

(Start: 52 @50738 has 38 MA's), (59, 50696), (86, 50600), (100, 50531), (104, 50492),

Gene: Thresher_46 Start: 36685, Stop: 36281, Start Num: 48

Candidate Starts for Thresher_46:

(Start: 48 @36685 has 66 MA's), (77, 36550), (85, 36526), (89, 36502), (98, 36469), (115, 36334),

Gene: Tomaszewski_40 Start: 34800, Stop: 34435, Start Num: 48

Candidate Starts for Tomaszewski_40:

(43, 34815), (Start: 48 @34800 has 66 MA's), (77, 34665), (85, 34641), (89, 34617), (102, 34554),

Gene: Tortellini_64 Start: 43747, Stop: 44214, Start Num: 33

Candidate Starts for Tortellini_64:

(20, 43702), (Start: 33 @43747 has 1 MA's), (56, 43822), (59, 43846), (68, 43888), (116, 44155), (120, 44200),

Gene: VRedHorse_87 Start: 48107, Stop: 48463, Start Num: 52

Candidate Starts for VRedHorse_87:

(Start: 52 @48107 has 38 MA's), (107, 48359),

Gene: Wachhund_79 Start: 46376, Stop: 46765, Start Num: 34

Candidate Starts for Wachhund_79:

(20, 46334), (21, 46337), (Start: 34 @46376 has 2 MA's), (39, 46388), (57, 46454), (69, 46517), (75, 46541), (97, 46625), (99, 46637),

Gene: Wanda_76 Start: 50200, Stop: 49835, Start Num: 52

Candidate Starts for Wanda_76:

(Start: 52 @50200 has 38 MA's), (59, 50158), (86, 50062), (100, 49993), (104, 49954),

Gene: Xandras_43 Start: 35049, Stop: 34684, Start Num: 48

Candidate Starts for Xandras_43:

(Start: 48 @35049 has 66 MA's), (77, 34914), (85, 34890), (89, 34866), (102, 34803),

Gene: Yoshi_97 Start: 50855, Stop: 51199, Start Num: 52

Candidate Starts for Yoshi_97:

(14, 50720), (17, 50744), (35, 50801), (40, 50813), (45, 50822), (Start: 52 @50855 has 38 MA's), (106, 51101),

Gene: Youngblood_43 Start: 35542, Stop: 35174, Start Num: 48

Candidate Starts for Youngblood_43:

(Start: 48 @35542 has 66 MA's), (51, 35530), (77, 35404), (85, 35380), (89, 35356), (102, 35293),

Gene: Zapner_89 Start: 47534, Stop: 47902, Start Num: 48

Candidate Starts for Zapner_89:

(30, 47498), (Start: 48 @47534 has 66 MA's), (77, 47669), (85, 47693), (89, 47717), (100, 47762), (102, 47780), (110, 47828),

Gene: Zelink_70 Start: 51051, Stop: 50686, Start Num: 52

Candidate Starts for Zelink_70:

(Start: 52 @51051 has 38 MA's), (59, 51009), (86, 50913), (100, 50844), (104, 50805),