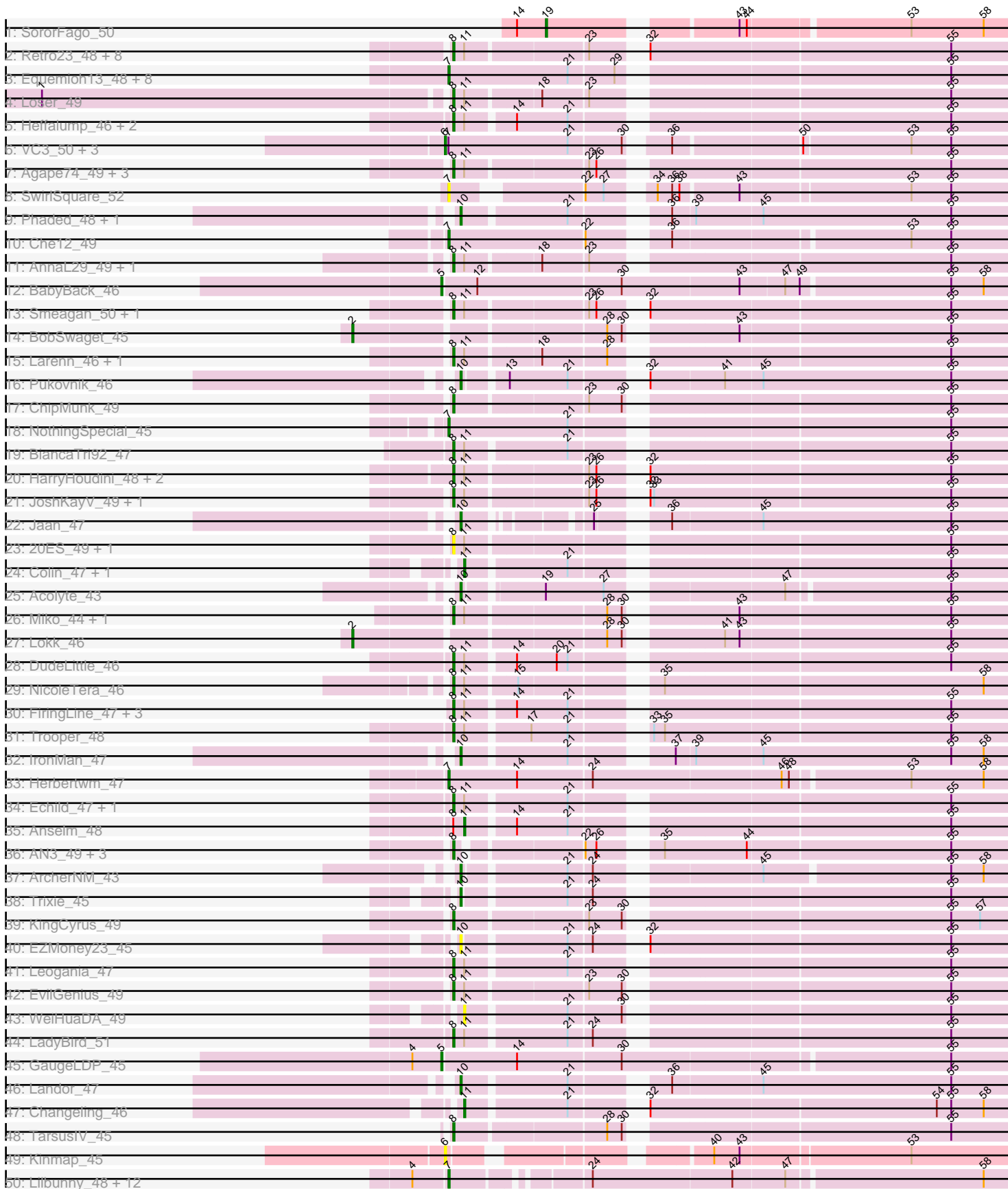


Pham 196364



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 196364 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196364 has 133 members, 12 are drafts.

Phages represented in each track:

- Track 1 : SororFago_50
- Track 2 : Retro23_48, Georgie2_48, Crucio_47, Dignity_49, SemperFi_48, SweetiePie_47, Dalmatian_48, Turbido_48, Jerm_49
- Track 3 : Equemioh13_48, Buggy_49, MiculUcigas_47, Baehexic_46, Updawg_48, Centaur_48, WideWale_48, NaSiaTalie_47, Flare16_47
- Track 4 : Loser_49
- Track 5 : Heffalump_46, QueenB2_46, Fameo_47
- Track 6 : VC3_50, C3_45, AN18_50, AN9_50
- Track 7 : Agape74_49, AbbyPaige_49, LilTurb_48, Whabigail7_48
- Track 8 : SwirlSquare_52
- Track 9 : Phaded_48, Bactobuster_46
- Track 10 : Che12_49
- Track 11 : AnnaL29_49, RedRock_49
- Track 12 : BabyBack_46
- Track 13 : Smeagan_50, Leviathan_49
- Track 14 : BobSwaget_45
- Track 15 : Larenn_46, Malec_47
- Track 16 : Pukovnik_46
- Track 17 : ChipMunk_49
- Track 18 : NothingSpecial_45
- Track 19 : BiancaTri92_47
- Track 20 : HarryHoudini_48, Piro94_47, Drake55_49
- Track 21 : JoshKayV_49, CRB1_50
- Track 22 : Jaan_47
- Track 23 : 20ES_49, First_0048
- Track 24 : Colin_47, Kalpine_45
- Track 25 : Acolyte_43
- Track 26 : Miko_44, Rachaly_46
- Track 27 : Lokk_46
- Track 28 : DudeLittle_46
- Track 29 : NicoleTera_46
- Track 30 : FiringLine_47, Power_46, SnapTap_47, QueenBeesly_47
- Track 31 : Trooper_48
- Track 32 : IronMan_47
- Track 33 : Herbertwm_47
- Track 34 : Echild_47, Benvolio_44
- Track 35 : Anselm_48

- Track 36 : AN3_49, VA6_47, Deloris_47, BengiVuitton_48
- Track 37 : ArcherNM_43
- Track 38 : Trixie_45
- Track 39 : KingCyrus_49
- Track 40 : EZMoney23_45
- Track 41 : Leogania_47
- Track 42 : EvilGenius_49
- Track 43 : WeiHuaDA_49
- Track 44 : LadyBird_51
- Track 45 : GaugeLDP_45
- Track 46 : Landor_47
- Track 47 : Changeling_46
- Track 48 : TarsusIV_45
- Track 49 : Kinmap_45
- Track 50 : Lilbunny_48, ToneTone_46, Wiks_48, Tucker_49, Hammer_50, Blue7_51, Zaka_49, Indra_52, Zulu_49, WunderPhul_49, Rifter_50, Jeffabunny_49, Gruunaga_49
- Track 51 : Artemis2UCLA_49, Isiphiwo_47, SuperAwesome_49, Candra_49, GreedyLawyer_49, Kipper29_49, Dorothea_49, Gladiator_47, SuperCallie99_48, VohminGhazi_49, Newrala_49, Cookiedough_49, Kazan_50, McFly_49, Roksolana_50, Chartreuse_48, Neeharika16_48, Pmask_49, CloudWang3_49, DaVinci_48, EricB_49, SmellyB_49
- Track 52 : Koko_50
- Track 53 : Garak_51, Helmet_51, Yokurt_49, Hexamo_49
- Track 54 : Priamo_50, Jordennis_48
- Track 55 : PP_50

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

The start number called the most often in the published annotations is 8, it was called in 49 of the 121 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 20ES_49, AN3_49, AbbyPaige_49, Agape74_49, AnnaL29_49, BengiVuitton_48, Benvolio_44, BiancaTri92_47, CRB1_50, ChipMunk_49, Crucio_47, Dalmatian_48, Deloris_47, Dignity_49, Drake55_49, DudeLittle_46, Echild_47, EvilGenius_49, Fameo_47, FiringLine_47, First_0048, Georgie2_48, HarryHoudini_48, Heffalump_46, Jerm_49, JoshKayV_49, KingCyrus_49, LadyBird_51, Larenn_46, Leogania_47, Leviathan_49, LiTurb_48, Loser_49, Malec_47, Miko_44, NicoleTera_46, Piro94_47, Power_46, QueenB2_46, QueenBeesly_47, Rachaly_46, RedRock_49, Retro23_48, SemperFi_48, Smeagan_50, SnapTap_47, SweetiePie_47, TarsusIV_45, Trooper_48, Turbido_48, VA6_47, Whabigail7_48,

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

- Anselm_48,

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

- AN9_50, ANI8_50, Acolyte_43, ArcherNM_43, Artemis2UCLA_49, BabyBack_46, Bactobuster_46, Baehexic_46, Blue7_51, BobSwaget_45, Buggy_49, C3_45, Candra_49, Centaur_48, Changeling_46, Chartreuse_48, Che12_49,

CloudWang3_49, Colin_47, Cookiedough_49, DaVinci_48, Dorothea_49, EZMoney23_45, Equemioh13_48, EricB_49, Flare16_47, Garak_51, GaugeLDP_45, Gladiator_47, GreedyLawyer_49, Gruunaga_49, Hammer_50, Helmet_51, Herbertwm_47, Hexamo_49, Indra_52, IronMan_47, Isiphiwo_47, Jaan_47, Jeffabunny_49, Jordennis_48, Kalpine_45, Kazan_50, Kinmap_45, Kipper29_49, Koko_50, Landor_47, Lilbunny_48, Lokk_46, McFly_49, MiculUcigas_47, NaSiaTalie_47, Neeharika16_48, Newrala_49, NothingSpecial_45, PP_50, Phaded_48, Pmask_49, Priamo_50, Pukovnik_46, Rifter_50, Roksolana_50, SmellyB_49, SororFago_50, SuperAwesome_49, SuperCallie99_48, SwirlSquare_52, ToneTone_46, Trixie_45, Tucker_49, Updawg_48, VC3_50, VohminGhazi_49, WeiHuaDA_49, WideWale_48, Wiks_48, WunderPhul_49, Yokurt_49, Zaka_49, Zulu_49,

Summary by start number:

Start 2:

- Found in 2 of 133 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 121
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BobSwaget_45 (A2), Lokk_46 (A2),

Start 4:

- Found in 43 of 133 (32.3%) of genes in pham
- Manual Annotations of this start: 2 of 121
- Called 9.3% of time when present
- Phage (with cluster) where this start called: Garak_51 (A6), Helmet_51 (A6), Hexamo_49 (A6), Yokurt_49 (A6),

Start 5:

- Found in 2 of 133 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 121
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyBack_46 (A2), GaugeLDP_45 (A2),

Start 6:

- Found in 5 of 133 (3.8%) of genes in pham
- Manual Annotations of this start: 4 of 121
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AN9_50 (A2), ANI8_50 (A2), C3_45 (A2), Kinmap_45 (A21), VC3_50 (A2),

Start 7:

- Found in 59 of 133 (44.4%) of genes in pham
- Manual Annotations of this start: 48 of 121
- Called 86.4% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_49 (A6), Baehexic_46 (A2), Blue7_51 (A6), Buggy_49 (A2), Candra_49 (A6), Centaur_48 (A2), Chartreuse_48 (A6), Che12_49 (A2), CloudWang3_49 (A6), Cookiedough_49 (A6), DaVinci_48 (A6), Dorothea_49 (A6), Equemioh13_48 (A2), EricB_49 (A6), Flare16_47 (A2), Gladiator_47 (A6), GreedyLawyer_49 (A6), Gruunaga_49 (A6), Hammer_50 (A6), Herbertwm_47 (A2), Indra_52 (A6), Isiphiwo_47 (A6), Jeffabunny_49 (A6), Jordennis_48 (A6), Kazan_50 (A6), Kipper29_49 (A6), Koko_50 (A6), Lilbunny_48 (A6), McFly_49 (A6), MiculUcigas_47 (A2), NaSiaTalie_47 (A2),

Neeharika16_48 (A6), Newrala_49 (A6), NothingSpecial_45 (A2), Pmask_49 (A6), Priamo_50 (A6), Rifter_50 (A6), Roksolana_50 (A6), SmellyB_49 (A6), SuperAwesome_49 (A6), SuperCallie99_48 (A6), SwirlSquare_52 (A2), ToneTone_46 (A6), Tucker_49 (A6), Updawg_48 (A2), VohminGhazi_49 (A6), WideWale_48 (A2), Wiks_48 (A6), WunderPhul_49 (A6), Zaka_49 (A6), Zulu_49 (A6),

Start 8:

- Found in 53 of 133 (39.8%) of genes in pham
- Manual Annotations of this start: 49 of 121
- Called 98.1% of time when present
- Phage (with cluster) where this start called: 20ES_49 (A2), AN3_49 (A2), AbbyPaige_49 (A2), Agape74_49 (A2), AnnaL29_49 (A2), BengiVuitton_48 (A2), Benvolio_44 (A2), BiancaTri92_47 (A2), CRB1_50 (A2), ChipMunk_49 (A2), Crucio_47 (A2), Dalmatian_48 (A2), Deloris_47 (A2), Dignity_49 (A2), Drake55_49 (A2), DudeLittle_46 (A2), Echid_47 (A2), EvilGenius_49 (A2), Fameo_47 (A2), FiringLine_47 (A2), First_0048 (A2), Georgie2_48 (A2), HarryHoudini_48 (A2), Heffalump_46 (A2), Jerm_49 (A2), JoshKayV_49 (A2), KingCyrus_49 (A2), LadyBird_51 (A2), Larenn_46 (A2), Leogania_47 (A2), Leviathan_49 (A2), LilTurb_48 (A2), Loser_49 (A2), Malec_47 (A2), Miko_44 (A2), NicoleTera_46 (A2), Piro94_47 (A2), Power_46 (A2), QueenB2_46 (A2), QueenBeesly_47 (A2), Rachaly_46 (A2), RedRock_49 (A2), Retro23_48 (A2), SemperFi_48 (A2), Smeagan_50 (A2), SnapTap_47 (A2), SweetiePie_47 (A2), TarsusIV_45 (A2), Trooper_48 (A2), Turbido_48 (A2), VA6_47 (A2), Whabigail7_48 (A2),

Start 9:

- Found in 1 of 133 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 121
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PP_50 (A7),

Start 10:

- Found in 10 of 133 (7.5%) of genes in pham
- Manual Annotations of this start: 9 of 121
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acolyte_43 (A2), ArcherNM_43 (A2), Bactobuster_46 (A2), EZMoney23_45 (A2), IronMan_47 (A2), Jaan_47 (A2), Landor_47 (A2), Phaded_48 (A2), Pukovnik_46 (A2), Trixie_45 (A2),

Start 11:

- Found in 50 of 133 (37.6%) of genes in pham
- Manual Annotations of this start: 3 of 121
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Anselm_48 (A2), Changeling_46 (A2), Colin_47 (A2), Kalpine_45 (A2), WeiHuaDA_49 (A2),

Start 19:

- Found in 2 of 133 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 121
- Called 50.0% of time when present
- Phage (with cluster) where this start called: SororFago_50 (A14),

Summary by clusters:

There are 5 clusters represented in this pham: A21, A2, A14, A7, A6,

Info for manual annotations of cluster A14:

- Start number 19 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A2:

- Start number 2 was manually annotated 2 times for cluster A2.
- Start number 5 was manually annotated 2 times for cluster A2.
- Start number 6 was manually annotated 4 times for cluster A2.
- Start number 7 was manually annotated 12 times for cluster A2.
- Start number 8 was manually annotated 49 times for cluster A2.
- Start number 10 was manually annotated 9 times for cluster A2.
- Start number 11 was manually annotated 3 times for cluster A2.

Info for manual annotations of cluster A6:

- Start number 4 was manually annotated 2 times for cluster A6.
- Start number 7 was manually annotated 36 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 9 was manually annotated 1 time for cluster A7.

Gene Information:

Gene: 20ES_49 Start: 32435, Stop: 32013, Start Num: 8

Candidate Starts for 20ES_49:

(Start: 8 @32435 has 49 MA's), (Start: 11 @32426 has 3 MA's), (55, 32060),

Gene: AN3_49 Start: 32806, Stop: 32393, Start Num: 8

Candidate Starts for AN3_49:

(Start: 8 @32806 has 49 MA's), (22, 32716), (26, 32707), (35, 32671), (44, 32605), (55, 32440),

Gene: AN9_50 Start: 32346, Stop: 31912, Start Num: 6

Candidate Starts for AN9_50:

(Start: 6 @32346 has 4 MA's), (Start: 7 @32343 has 48 MA's), (21, 32244), (30, 32202), (36, 32178), (50, 32079), (53, 31992), (55, 31959),

Gene: ANI8_50 Start: 32346, Stop: 31912, Start Num: 6

Candidate Starts for ANI8_50:

(Start: 6 @32346 has 4 MA's), (Start: 7 @32343 has 48 MA's), (21, 32244), (30, 32202), (36, 32178), (50, 32079), (53, 31992), (55, 31959),

Gene: AbbyPaige_49 Start: 32616, Stop: 32194, Start Num: 8

Candidate Starts for AbbyPaige_49:

(Start: 8 @32616 has 49 MA's), (Start: 11 @32607 has 3 MA's), (23, 32514), (26, 32508), (55, 32241),

Gene: Acolyte_43 Start: 31589, Stop: 31182, Start Num: 10

Candidate Starts for Acolyte_43:

(Start: 10 @31589 has 9 MA's), (Start: 19 @31532 has 1 MA's), (27, 31484), (47, 31358), (55, 31229),

Gene: Agape74_49 Start: 32601, Stop: 32179, Start Num: 8
Candidate Starts for Agape74_49:
(Start: 8 @32601 has 49 MA's), (Start: 11 @32592 has 3 MA's), (23, 32499), (26, 32493), (55, 32226),

Gene: AnnaL29_49 Start: 33146, Stop: 32724, Start Num: 8
Candidate Starts for AnnaL29_49:
(Start: 8 @33146 has 49 MA's), (Start: 11 @33137 has 3 MA's), (18, 33080), (23, 33044), (55, 32771),

Gene: Anselm_48 Start: 32523, Stop: 32110, Start Num: 11
Candidate Starts for Anselm_48:
(Start: 8 @32532 has 49 MA's), (Start: 11 @32523 has 3 MA's), (14, 32487), (21, 32445), (55, 32157),

Gene: ArcherNM_43 Start: 32185, Stop: 31778, Start Num: 10
Candidate Starts for ArcherNM_43:
(Start: 10 @32185 has 9 MA's), (21, 32107), (24, 32089), (45, 31972), (55, 31825), (58, 31798),

Gene: Artemis2UCLA_49 Start: 30834, Stop: 30406, Start Num: 7
Candidate Starts for Artemis2UCLA_49:
(Start: 4 @30861 has 2 MA's), (Start: 7 @30834 has 48 MA's), (24, 30738), (31, 30702), (44, 30612),
(46, 30585), (47, 30582), (58, 30426),

Gene: BabyBack_46 Start: 32865, Stop: 32410, Start Num: 5
Candidate Starts for BabyBack_46:
(Start: 5 @32865 has 2 MA's), (12, 32838), (30, 32721), (43, 32625), (47, 32589), (49, 32577), (55,
32457), (58, 32430),

Gene: Bactobuster_46 Start: 33096, Stop: 32677, Start Num: 10
Candidate Starts for Bactobuster_46:
(Start: 10 @33096 has 9 MA's), (21, 33015), (36, 32952), (39, 32934), (45, 32880), (55, 32724),

Gene: Baehexic_46 Start: 32303, Stop: 31869, Start Num: 7
Candidate Starts for Baehexic_46:
(Start: 7 @32303 has 48 MA's), (21, 32204), (29, 32168), (55, 31916),

Gene: BengiVuitton_48 Start: 32388, Stop: 31975, Start Num: 8
Candidate Starts for BengiVuitton_48:
(Start: 8 @32388 has 49 MA's), (22, 32298), (26, 32289), (35, 32253), (44, 32187), (55, 32022),

Gene: Benvolio_44 Start: 31563, Stop: 31141, Start Num: 8
Candidate Starts for Benvolio_44:
(Start: 8 @31563 has 49 MA's), (Start: 11 @31554 has 3 MA's), (21, 31476), (55, 31188),

Gene: BiancaTri92_47 Start: 32931, Stop: 32509, Start Num: 8
Candidate Starts for BiancaTri92_47:
(Start: 8 @32931 has 49 MA's), (Start: 11 @32922 has 3 MA's), (21, 32844), (55, 32556),

Gene: Blue7_51 Start: 30930, Stop: 30502, Start Num: 7
Candidate Starts for Blue7_51:
(Start: 4 @30957 has 2 MA's), (Start: 7 @30930 has 48 MA's), (24, 30834), (42, 30720), (47, 30678),
(58, 30522),

Gene: BobSwaget_45 Start: 31896, Stop: 31399, Start Num: 2
Candidate Starts for BobSwaget_45:

(Start: 2 @31896 has 2 MA's), (28, 31704), (30, 31692), (43, 31617), (55, 31446),

Gene: Buggy_49 Start: 32673, Stop: 32239, Start Num: 7

Candidate Starts for Buggy_49:

(Start: 7 @32673 has 48 MA's), (21, 32574), (29, 32538), (55, 32286),

Gene: C3_45 Start: 32346, Stop: 31912, Start Num: 6

Candidate Starts for C3_45:

(Start: 6 @32346 has 4 MA's), (Start: 7 @32343 has 48 MA's), (21, 32244), (30, 32202), (36, 32178), (50, 32079), (53, 31992), (55, 31959),

Gene: CRB1_50 Start: 32781, Stop: 32359, Start Num: 8

Candidate Starts for CRB1_50:

(Start: 8 @32781 has 49 MA's), (Start: 11 @32772 has 3 MA's), (23, 32679), (26, 32673), (32, 32649), (33, 32646), (55, 32406),

Gene: Candra_49 Start: 31173, Stop: 30745, Start Num: 7

Candidate Starts for Candra_49:

(Start: 4 @31200 has 2 MA's), (Start: 7 @31173 has 48 MA's), (24, 31077), (31, 31041), (44, 30951), (46, 30924), (47, 30921), (58, 30765),

Gene: Centaur_48 Start: 32520, Stop: 32086, Start Num: 7

Candidate Starts for Centaur_48:

(Start: 7 @32520 has 48 MA's), (21, 32421), (29, 32385), (55, 32133),

Gene: Changeling_46 Start: 32725, Stop: 32312, Start Num: 11

Candidate Starts for Changeling_46:

(Start: 11 @32725 has 3 MA's), (21, 32647), (32, 32602), (54, 32371), (55, 32359), (58, 32332),

Gene: Chartreuse_48 Start: 30533, Stop: 30105, Start Num: 7

Candidate Starts for Chartreuse_48:

(Start: 4 @30560 has 2 MA's), (Start: 7 @30533 has 48 MA's), (24, 30437), (31, 30401), (44, 30311), (46, 30284), (47, 30281), (58, 30125),

Gene: Che12_49 Start: 31155, Stop: 30727, Start Num: 7

Candidate Starts for Che12_49:

(Start: 7 @31155 has 48 MA's), (22, 31044), (36, 30993), (53, 30807), (55, 30774),

Gene: ChipMunk_49 Start: 33873, Stop: 33451, Start Num: 8

Candidate Starts for ChipMunk_49:

(Start: 8 @33873 has 49 MA's), (23, 33771), (30, 33744), (55, 33498),

Gene: CloudWang3_49 Start: 30934, Stop: 30506, Start Num: 7

Candidate Starts for CloudWang3_49:

(Start: 4 @30961 has 2 MA's), (Start: 7 @30934 has 48 MA's), (24, 30838), (31, 30802), (44, 30712), (46, 30685), (47, 30682), (58, 30526),

Gene: Colin_47 Start: 32497, Stop: 32084, Start Num: 11

Candidate Starts for Colin_47:

(Start: 11 @32497 has 3 MA's), (21, 32419), (55, 32131),

Gene: Cookiedough_49 Start: 31149, Stop: 30721, Start Num: 7

Candidate Starts for Cookiedough_49:

(Start: 4 @31176 has 2 MA's), (Start: 7 @31149 has 48 MA's), (24, 31053), (31, 31017), (44, 30927), (46, 30900), (47, 30897), (58, 30741),

Gene: Crucio_47 Start: 32116, Stop: 31694, Start Num: 8

Candidate Starts for Crucio_47:

(Start: 8 @32116 has 49 MA's), (Start: 11 @32107 has 3 MA's), (23, 32014), (32, 31984), (55, 31741),

Gene: DaVinci_48 Start: 30587, Stop: 30159, Start Num: 7

Candidate Starts for DaVinci_48:

(Start: 4 @30614 has 2 MA's), (Start: 7 @30587 has 48 MA's), (24, 30491), (31, 30455), (44, 30365), (46, 30338), (47, 30335), (58, 30179),

Gene: Dalmatian_48 Start: 32508, Stop: 32086, Start Num: 8

Candidate Starts for Dalmatian_48:

(Start: 8 @32508 has 49 MA's), (Start: 11 @32499 has 3 MA's), (23, 32406), (32, 32376), (55, 32133),

Gene: Deloris_47 Start: 32057, Stop: 31644, Start Num: 8

Candidate Starts for Deloris_47:

(Start: 8 @32057 has 49 MA's), (22, 31967), (26, 31958), (35, 31922), (44, 31856), (55, 31691),

Gene: Dignity_49 Start: 32681, Stop: 32259, Start Num: 8

Candidate Starts for Dignity_49:

(Start: 8 @32681 has 49 MA's), (Start: 11 @32672 has 3 MA's), (23, 32579), (32, 32549), (55, 32306),

Gene: Dorothea_49 Start: 31156, Stop: 30728, Start Num: 7

Candidate Starts for Dorothea_49:

(Start: 4 @31183 has 2 MA's), (Start: 7 @31156 has 48 MA's), (24, 31060), (31, 31024), (44, 30934), (46, 30907), (47, 30904), (58, 30748),

Gene: Drake55_49 Start: 32605, Stop: 32183, Start Num: 8

Candidate Starts for Drake55_49:

(Start: 8 @32605 has 49 MA's), (Start: 11 @32596 has 3 MA's), (23, 32503), (26, 32497), (32, 32473), (55, 32230),

Gene: DudeLittle_46 Start: 32250, Stop: 31828, Start Num: 8

Candidate Starts for DudeLittle_46:

(Start: 8 @32250 has 49 MA's), (Start: 11 @32241 has 3 MA's), (14, 32205), (20, 32172), (21, 32163), (55, 31875),

Gene: EZMoney23_45 Start: 32055, Stop: 31642, Start Num: 10

Candidate Starts for EZMoney23_45:

(Start: 10 @32055 has 9 MA's), (21, 31977), (24, 31959), (32, 31932), (55, 31689),

Gene: Echild_47 Start: 31587, Stop: 31165, Start Num: 8

Candidate Starts for Echild_47:

(Start: 8 @31587 has 49 MA's), (Start: 11 @31578 has 3 MA's), (21, 31500), (55, 31212),

Gene: Equemioh13_48 Start: 32422, Stop: 31988, Start Num: 7

Candidate Starts for Equemioh13_48:

(Start: 7 @32422 has 48 MA's), (21, 32323), (29, 32287), (55, 32035),

Gene: EricB_49 Start: 31130, Stop: 30702, Start Num: 7

Candidate Starts for EricB_49:

(Start: 4 @31157 has 2 MA's), (Start: 7 @31130 has 48 MA's), (24, 31034), (31, 30998), (44, 30908), (46, 30881), (47, 30878), (58, 30722),

Gene: EvilGenius_49 Start: 33877, Stop: 33455, Start Num: 8

Candidate Starts for EvilGenius_49:

(Start: 8 @33877 has 49 MA's), (Start: 11 @33868 has 3 MA's), (23, 33775), (30, 33748), (55, 33502),

Gene: Fameo_47 Start: 32426, Stop: 32004, Start Num: 8

Candidate Starts for Fameo_47:

(Start: 8 @32426 has 49 MA's), (Start: 11 @32417 has 3 MA's), (14, 32381), (21, 32339), (55, 32051),

Gene: FiringLine_47 Start: 32097, Stop: 31675, Start Num: 8

Candidate Starts for FiringLine_47:

(Start: 8 @32097 has 49 MA's), (Start: 11 @32088 has 3 MA's), (14, 32052), (21, 32010), (55, 31722),

Gene: First_0048 Start: 32311, Stop: 31889, Start Num: 8

Candidate Starts for First_0048:

(Start: 8 @32311 has 49 MA's), (Start: 11 @32302 has 3 MA's), (55, 31936),

Gene: Flare16_47 Start: 32181, Stop: 31747, Start Num: 7

Candidate Starts for Flare16_47:

(Start: 7 @32181 has 48 MA's), (21, 32082), (29, 32046), (55, 31794),

Gene: Garak_51 Start: 31328, Stop: 30873, Start Num: 4

Candidate Starts for Garak_51:

(Start: 4 @31328 has 2 MA's), (Start: 7 @31301 has 48 MA's), (24, 31205), (42, 31091), (47, 31049), (58, 30893),

Gene: GaugeLDP_45 Start: 32488, Stop: 32036, Start Num: 5

Candidate Starts for GaugeLDP_45:

(Start: 4 @32512 has 2 MA's), (Start: 5 @32488 has 2 MA's), (14, 32428), (30, 32344), (55, 32083),

Gene: Georgie2_48 Start: 32142, Stop: 31720, Start Num: 8

Candidate Starts for Georgie2_48:

(Start: 8 @32142 has 49 MA's), (Start: 11 @32133 has 3 MA's), (23, 32040), (32, 32010), (55, 31767),

Gene: Gladiator_47 Start: 30461, Stop: 30033, Start Num: 7

Candidate Starts for Gladiator_47:

(Start: 4 @30488 has 2 MA's), (Start: 7 @30461 has 48 MA's), (24, 30365), (31, 30329), (44, 30239), (46, 30212), (47, 30209), (58, 30053),

Gene: GreedyLawyer_49 Start: 31137, Stop: 30709, Start Num: 7

Candidate Starts for GreedyLawyer_49:

(Start: 4 @31164 has 2 MA's), (Start: 7 @31137 has 48 MA's), (24, 31041), (31, 31005), (44, 30915), (46, 30888), (47, 30885), (58, 30729),

Gene: Gruunaga_49 Start: 31137, Stop: 30709, Start Num: 7

Candidate Starts for Gruunaga_49:

(Start: 4 @31164 has 2 MA's), (Start: 7 @31137 has 48 MA's), (24, 31041), (42, 30927), (47, 30885), (58, 30729),

Gene: Hammer_50 Start: 30740, Stop: 30312, Start Num: 7

Candidate Starts for Hammer_50:

(Start: 4 @30767 has 2 MA's), (Start: 7 @30740 has 48 MA's), (24, 30644), (42, 30530), (47, 30488), (58, 30332),

Gene: HarryHoudini_48 Start: 32614, Stop: 32192, Start Num: 8

Candidate Starts for HarryHoudini_48:

(Start: 8 @32614 has 49 MA's), (Start: 11 @32605 has 3 MA's), (23, 32512), (26, 32506), (32, 32482), (55, 32239),

Gene: Heffalump_46 Start: 32894, Stop: 32472, Start Num: 8

Candidate Starts for Heffalump_46:

(Start: 8 @32894 has 49 MA's), (Start: 11 @32885 has 3 MA's), (14, 32849), (21, 32807), (55, 32519),

Gene: Helmet_51 Start: 31328, Stop: 30873, Start Num: 4

Candidate Starts for Helmet_51:

(Start: 4 @31328 has 2 MA's), (Start: 7 @31301 has 48 MA's), (24, 31205), (42, 31091), (47, 31049), (58, 30893),

Gene: Herbertwm_47 Start: 31973, Stop: 31524, Start Num: 7

Candidate Starts for Herbertwm_47:

(Start: 7 @31973 has 48 MA's), (14, 31916), (24, 31856), (46, 31703), (48, 31697), (53, 31604), (58, 31544),

Gene: Hexamo_49 Start: 30949, Stop: 30494, Start Num: 4

Candidate Starts for Hexamo_49:

(Start: 4 @30949 has 2 MA's), (Start: 7 @30922 has 48 MA's), (24, 30826), (42, 30712), (47, 30670), (58, 30514),

Gene: Indra_52 Start: 31302, Stop: 30874, Start Num: 7

Candidate Starts for Indra_52:

(Start: 4 @31329 has 2 MA's), (Start: 7 @31302 has 48 MA's), (24, 31206), (42, 31092), (47, 31050), (58, 30894),

Gene: IronMan_47 Start: 33279, Stop: 32860, Start Num: 10

Candidate Starts for IronMan_47:

(Start: 10 @33279 has 9 MA's), (21, 33198), (37, 33132), (39, 33117), (45, 33063), (55, 32907), (58, 32880),

Gene: Isiphiwo_47 Start: 30674, Stop: 30246, Start Num: 7

Candidate Starts for Isiphiwo_47:

(Start: 4 @30701 has 2 MA's), (Start: 7 @30674 has 48 MA's), (24, 30578), (31, 30542), (44, 30452), (46, 30425), (47, 30422), (58, 30266),

Gene: Jaan_47 Start: 33445, Stop: 33047, Start Num: 10

Candidate Starts for Jaan_47:

(Start: 10 @33445 has 9 MA's), (25, 33364), (36, 33322), (45, 33250), (55, 33094),

Gene: Jeffabunny_49 Start: 30958, Stop: 30530, Start Num: 7

Candidate Starts for Jeffabunny_49:

(Start: 4 @30985 has 2 MA's), (Start: 7 @30958 has 48 MA's), (24, 30862), (42, 30748), (47, 30706), (58, 30550),

Gene: Jerm_49 Start: 32674, Stop: 32252, Start Num: 8

Candidate Starts for Jerm_49:

(Start: 8 @32674 has 49 MA's), (Start: 11 @32665 has 3 MA's), (23, 32572), (32, 32542), (55, 32299),

Gene: Jordennis_48 Start: 30594, Stop: 30166, Start Num: 7

Candidate Starts for Jordennis_48:

(Start: 4 @30621 has 2 MA's), (Start: 7 @30594 has 48 MA's), (24, 30498), (31, 30462), (44, 30372), (46, 30345), (47, 30342),

Gene: JoshKayV_49 Start: 32755, Stop: 32333, Start Num: 8

Candidate Starts for JoshKayV_49:

(Start: 8 @32755 has 49 MA's), (Start: 11 @32746 has 3 MA's), (23, 32653), (26, 32647), (32, 32623), (33, 32620), (55, 32380),

Gene: Kalpine_45 Start: 32395, Stop: 31982, Start Num: 11

Candidate Starts for Kalpine_45:

(Start: 11 @32395 has 3 MA's), (21, 32317), (55, 32029),

Gene: Kazan_50 Start: 31143, Stop: 30715, Start Num: 7

Candidate Starts for Kazan_50:

(Start: 4 @31170 has 2 MA's), (Start: 7 @31143 has 48 MA's), (24, 31047), (31, 31011), (44, 30921), (46, 30894), (47, 30891), (58, 30735),

Gene: KingCyrus_49 Start: 33872, Stop: 33450, Start Num: 8

Candidate Starts for KingCyrus_49:

(Start: 8 @33872 has 49 MA's), (23, 33770), (30, 33743), (55, 33497), (57, 33473),

Gene: Kinmap_45 Start: 31426, Stop: 31016, Start Num: 6

Candidate Starts for Kinmap_45:

(Start: 6 @31426 has 4 MA's), (40, 31252), (43, 31231), (53, 31096),

Gene: Kipper29_49 Start: 31156, Stop: 30728, Start Num: 7

Candidate Starts for Kipper29_49:

(Start: 4 @31183 has 2 MA's), (Start: 7 @31156 has 48 MA's), (24, 31060), (31, 31024), (44, 30934), (46, 30907), (47, 30904), (58, 30748),

Gene: Koko_50 Start: 31279, Stop: 30851, Start Num: 7

Candidate Starts for Koko_50:

(Start: 4 @31306 has 2 MA's), (Start: 7 @31279 has 48 MA's), (24, 31183), (47, 31027), (58, 30871),

Gene: LadyBird_51 Start: 32746, Stop: 32324, Start Num: 8

Candidate Starts for LadyBird_51:

(Start: 8 @32746 has 49 MA's), (Start: 11 @32737 has 3 MA's), (21, 32659), (24, 32641), (55, 32371),

Gene: Landor_47 Start: 33357, Stop: 32938, Start Num: 10

Candidate Starts for Landor_47:

(Start: 10 @33357 has 9 MA's), (21, 33276), (36, 33213), (45, 33141), (55, 32985),

Gene: Larenn_46 Start: 32287, Stop: 31865, Start Num: 8

Candidate Starts for Larenn_46:

(Start: 8 @32287 has 49 MA's), (Start: 11 @32278 has 3 MA's), (18, 32221), (28, 32170), (55, 31912),

Gene: Leogania_47 Start: 33298, Stop: 32876, Start Num: 8

Candidate Starts for Leogania_47:

(Start: 8 @33298 has 49 MA's), (Start: 11 @33289 has 3 MA's), (21, 33211), (55, 32923),

Gene: Leviathan_49 Start: 32730, Stop: 32308, Start Num: 8

Candidate Starts for Leviathan_49:

(Start: 8 @32730 has 49 MA's), (Start: 11 @32721 has 3 MA's), (23, 32628), (26, 32622), (32, 32598), (55, 32355),

Gene: LilTurb_48 Start: 32563, Stop: 32141, Start Num: 8

Candidate Starts for LilTurb_48:

(Start: 8 @32563 has 49 MA's), (Start: 11 @32554 has 3 MA's), (23, 32461), (26, 32455), (55, 32188),

Gene: Lilbunny_48 Start: 30932, Stop: 30504, Start Num: 7

Candidate Starts for Lilbunny_48:

(Start: 4 @30959 has 2 MA's), (Start: 7 @30932 has 48 MA's), (24, 30836), (42, 30722), (47, 30680), (58, 30524),

Gene: Lokk_46 Start: 32421, Stop: 31924, Start Num: 2

Candidate Starts for Lokk_46:

(Start: 2 @32421 has 2 MA's), (28, 32229), (30, 32217), (41, 32154), (43, 32142), (55, 31971),

Gene: Loser_49 Start: 33095, Stop: 32673, Start Num: 8

Candidate Starts for Loser_49:

(1, 33422), (Start: 8 @33095 has 49 MA's), (Start: 11 @33086 has 3 MA's), (18, 33029), (23, 32993), (55, 32720),

Gene: Malec_47 Start: 32851, Stop: 32429, Start Num: 8

Candidate Starts for Malec_47:

(Start: 8 @32851 has 49 MA's), (Start: 11 @32842 has 3 MA's), (18, 32785), (28, 32734), (55, 32476),

Gene: McFly_49 Start: 31137, Stop: 30709, Start Num: 7

Candidate Starts for McFly_49:

(Start: 4 @31164 has 2 MA's), (Start: 7 @31137 has 48 MA's), (24, 31041), (31, 31005), (44, 30915), (46, 30888), (47, 30885), (58, 30729),

Gene: MiculUcigas_47 Start: 32081, Stop: 31647, Start Num: 7

Candidate Starts for MiculUcigas_47:

(Start: 7 @32081 has 48 MA's), (21, 31982), (29, 31946), (55, 31694),

Gene: Miko_44 Start: 32243, Stop: 31821, Start Num: 8

Candidate Starts for Miko_44:

(Start: 8 @32243 has 49 MA's), (Start: 11 @32234 has 3 MA's), (28, 32126), (30, 32114), (43, 32039), (55, 31868),

Gene: NaSiaTalie_47 Start: 32178, Stop: 31744, Start Num: 7

Candidate Starts for NaSiaTalie_47:

(Start: 7 @32178 has 48 MA's), (21, 32079), (29, 32043), (55, 31791),

Gene: Neeharika16_48 Start: 30597, Stop: 30169, Start Num: 7

Candidate Starts for Neeharika16_48:

(Start: 4 @30624 has 2 MA's), (Start: 7 @30597 has 48 MA's), (24, 30501), (31, 30465), (44, 30375), (46, 30348), (47, 30345), (58, 30189),

Gene: Newrala_49 Start: 31148, Stop: 30720, Start Num: 7

Candidate Starts for Newrala_49:

(Start: 4 @31175 has 2 MA's), (Start: 7 @31148 has 48 MA's), (24, 31052), (31, 31016), (44, 30926), (46, 30899), (47, 30896), (58, 30740),

Gene: NicoleTera_46 Start: 32449, Stop: 32027, Start Num: 8

Candidate Starts for NicoleTera_46:

(Start: 8 @32449 has 49 MA's), (Start: 11 @32440 has 3 MA's), (15, 32401), (35, 32305), (58, 32047),

Gene: NothingSpecial_45 Start: 32705, Stop: 32271, Start Num: 7

Candidate Starts for NothingSpecial_45:

(Start: 7 @32705 has 48 MA's), (21, 32606), (55, 32318),

Gene: PP_50 Start: 36311, Stop: 35883, Start Num: 9

Candidate Starts for PP_50:

(3, 36377), (Start: 9 @36311 has 1 MA's), (16, 36260), (30, 36179), (51, 35999), (52, 35981), (53, 35966), (56, 35918), (58, 35906),

Gene: Phaded_48 Start: 33339, Stop: 32920, Start Num: 10

Candidate Starts for Phaded_48:

(Start: 10 @33339 has 9 MA's), (21, 33258), (36, 33195), (39, 33177), (45, 33123), (55, 32967),

Gene: Piro94_47 Start: 32531, Stop: 32109, Start Num: 8

Candidate Starts for Piro94_47:

(Start: 8 @32531 has 49 MA's), (Start: 11 @32522 has 3 MA's), (23, 32429), (26, 32423), (32, 32399), (55, 32156),

Gene: Pmask_49 Start: 31149, Stop: 30721, Start Num: 7

Candidate Starts for Pmask_49:

(Start: 4 @31176 has 2 MA's), (Start: 7 @31149 has 48 MA's), (24, 31053), (31, 31017), (44, 30927), (46, 30900), (47, 30897), (58, 30741),

Gene: Power_46 Start: 32150, Stop: 31728, Start Num: 8

Candidate Starts for Power_46:

(Start: 8 @32150 has 49 MA's), (Start: 11 @32141 has 3 MA's), (14, 32105), (21, 32063), (55, 31775),

Gene: Priamo_50 Start: 30766, Stop: 30338, Start Num: 7

Candidate Starts for Priamo_50:

(Start: 4 @30793 has 2 MA's), (Start: 7 @30766 has 48 MA's), (24, 30670), (31, 30634), (44, 30544), (46, 30517), (47, 30514),

Gene: Pukovnik_46 Start: 32944, Stop: 32528, Start Num: 10

Candidate Starts for Pukovnik_46:

(Start: 10 @32944 has 9 MA's), (13, 32914), (21, 32866), (32, 32821), (41, 32761), (45, 32731), (55, 32575),

Gene: QueenB2_46 Start: 32110, Stop: 31688, Start Num: 8

Candidate Starts for QueenB2_46:

(Start: 8 @32110 has 49 MA's), (Start: 11 @32101 has 3 MA's), (14, 32065), (21, 32023), (55, 31735),

Gene: QueenBeesly_47 Start: 32097, Stop: 31675, Start Num: 8

Candidate Starts for QueenBeesly_47:

(Start: 8 @32097 has 49 MA's), (Start: 11 @32088 has 3 MA's), (14, 32052), (21, 32010), (55, 31722),

Gene: Rachaly_46 Start: 32420, Stop: 31998, Start Num: 8

Candidate Starts for Rachaly_46:

(Start: 8 @32420 has 49 MA's), (Start: 11 @32411 has 3 MA's), (28, 32303), (30, 32291), (43, 32216), (55, 32045),

Gene: RedRock_49 Start: 33308, Stop: 32886, Start Num: 8

Candidate Starts for RedRock_49:

(Start: 8 @33308 has 49 MA's), (Start: 11 @33299 has 3 MA's), (18, 33242), (23, 33206), (55, 32933),

Gene: Retro23_48 Start: 32504, Stop: 32082, Start Num: 8

Candidate Starts for Retro23_48:

(Start: 8 @32504 has 49 MA's), (Start: 11 @32495 has 3 MA's), (23, 32402), (32, 32372), (55, 32129),

Gene: Rifter_50 Start: 30703, Stop: 30275, Start Num: 7

Candidate Starts for Rifter_50:

(Start: 4 @30730 has 2 MA's), (Start: 7 @30703 has 48 MA's), (24, 30607), (42, 30493), (47, 30451), (58, 30295),

Gene: Roksolana_50 Start: 31185, Stop: 30757, Start Num: 7

Candidate Starts for Roksolana_50:

(Start: 4 @31212 has 2 MA's), (Start: 7 @31185 has 48 MA's), (24, 31089), (31, 31053), (44, 30963), (46, 30936), (47, 30933), (58, 30777),

Gene: SemperFi_48 Start: 32365, Stop: 31943, Start Num: 8

Candidate Starts for SemperFi_48:

(Start: 8 @32365 has 49 MA's), (Start: 11 @32356 has 3 MA's), (23, 32263), (32, 32233), (55, 31990),

Gene: Smeagan_50 Start: 32817, Stop: 32395, Start Num: 8

Candidate Starts for Smeagan_50:

(Start: 8 @32817 has 49 MA's), (Start: 11 @32808 has 3 MA's), (23, 32715), (26, 32709), (32, 32685), (55, 32442),

Gene: SmellyB_49 Start: 31137, Stop: 30709, Start Num: 7

Candidate Starts for SmellyB_49:

(Start: 4 @31164 has 2 MA's), (Start: 7 @31137 has 48 MA's), (24, 31041), (31, 31005), (44, 30915), (46, 30888), (47, 30885), (58, 30729),

Gene: SnapTap_47 Start: 32176, Stop: 31754, Start Num: 8

Candidate Starts for SnapTap_47:

(Start: 8 @32176 has 49 MA's), (Start: 11 @32167 has 3 MA's), (14, 32131), (21, 32089), (55, 31801),

Gene: SororFago_50 Start: 33759, Stop: 33412, Start Num: 19

Candidate Starts for SororFago_50:

(14, 33783), (Start: 19 @33759 has 1 MA's), (43, 33624), (44, 33618), (53, 33492), (58, 33432),

Gene: SuperAwesome_49 Start: 31148, Stop: 30720, Start Num: 7

Candidate Starts for SuperAwesome_49:

(Start: 4 @31175 has 2 MA's), (Start: 7 @31148 has 48 MA's), (24, 31052), (31, 31016), (44, 30926), (46, 30899), (47, 30896), (58, 30740),

Gene: SuperCallie99_48 Start: 31021, Stop: 30593, Start Num: 7

Candidate Starts for SuperCallie99_48:

(Start: 4 @31048 has 2 MA's), (Start: 7 @31021 has 48 MA's), (24, 30925), (31, 30889), (44, 30799), (46, 30772), (47, 30769), (58, 30613),

Gene: SweetiePie_47 Start: 32305, Stop: 31883, Start Num: 8
Candidate Starts for SweetiePie_47:
(Start: 8 @32305 has 49 MA's), (Start: 11 @32296 has 3 MA's), (23, 32203), (32, 32173), (55, 31930),

Gene: SwirlSquare_52 Start: 31390, Stop: 30980, Start Num: 7
Candidate Starts for SwirlSquare_52:
(Start: 7 @31390 has 48 MA's), (22, 31300), (27, 31285), (34, 31258), (36, 31246), (38, 31240), (43, 31195), (53, 31060), (55, 31027),

Gene: TarsusIV_45 Start: 31964, Stop: 31542, Start Num: 8
Candidate Starts for TarsusIV_45:
(Start: 8 @31964 has 49 MA's), (28, 31847), (30, 31835), (55, 31589),

Gene: ToneTone_46 Start: 30864, Stop: 30436, Start Num: 7
Candidate Starts for ToneTone_46:
(Start: 4 @30891 has 2 MA's), (Start: 7 @30864 has 48 MA's), (24, 30768), (42, 30654), (47, 30612), (58, 30456),

Gene: Trixie_45 Start: 32233, Stop: 31820, Start Num: 10
Candidate Starts for Trixie_45:
(Start: 10 @32233 has 9 MA's), (21, 32155), (24, 32137), (55, 31867),

Gene: Trooper_48 Start: 32526, Stop: 32104, Start Num: 8
Candidate Starts for Trooper_48:
(Start: 8 @32526 has 49 MA's), (Start: 11 @32517 has 3 MA's), (17, 32469), (21, 32439), (33, 32391), (35, 32382), (55, 32151),

Gene: Tucker_49 Start: 30751, Stop: 30323, Start Num: 7
Candidate Starts for Tucker_49:
(Start: 4 @30778 has 2 MA's), (Start: 7 @30751 has 48 MA's), (24, 30655), (42, 30541), (47, 30499), (58, 30343),

Gene: Turbido_48 Start: 32560, Stop: 32138, Start Num: 8
Candidate Starts for Turbido_48:
(Start: 8 @32560 has 49 MA's), (Start: 11 @32551 has 3 MA's), (23, 32458), (32, 32428), (55, 32185),

Gene: Updawg_48 Start: 32422, Stop: 31988, Start Num: 7
Candidate Starts for Updawg_48:
(Start: 7 @32422 has 48 MA's), (21, 32323), (29, 32287), (55, 32035),

Gene: VA6_47 Start: 32280, Stop: 31867, Start Num: 8
Candidate Starts for VA6_47:
(Start: 8 @32280 has 49 MA's), (22, 32190), (26, 32181), (35, 32145), (44, 32079), (55, 31914),

Gene: VC3_50 Start: 32346, Stop: 31912, Start Num: 6
Candidate Starts for VC3_50:
(Start: 6 @32346 has 4 MA's), (Start: 7 @32343 has 48 MA's), (21, 32244), (30, 32202), (36, 32178), (50, 32079), (53, 31992), (55, 31959),

Gene: VohminGhazi_49 Start: 31138, Stop: 30710, Start Num: 7
Candidate Starts for VohminGhazi_49:

(Start: 4 @31165 has 2 MA's), (Start: 7 @31138 has 48 MA's), (24, 31042), (31, 31006), (44, 30916), (46, 30889), (47, 30886), (58, 30730),

Gene: WeiHuaDA_49 Start: 33119, Stop: 32706, Start Num: 11
Candidate Starts for WeiHuaDA_49:
(Start: 11 @33119 has 3 MA's), (21, 33041), (30, 32999), (55, 32753),

Gene: Whabigail7_48 Start: 32545, Stop: 32123, Start Num: 8
Candidate Starts for Whabigail7_48:
(Start: 8 @32545 has 49 MA's), (Start: 11 @32536 has 3 MA's), (23, 32443), (26, 32437), (55, 32170),

Gene: WideWale_48 Start: 32422, Stop: 31988, Start Num: 7
Candidate Starts for WideWale_48:
(Start: 7 @32422 has 48 MA's), (21, 32323), (29, 32287), (55, 32035),

Gene: Wiks_48 Start: 30932, Stop: 30504, Start Num: 7
Candidate Starts for Wiks_48:
(Start: 4 @30959 has 2 MA's), (Start: 7 @30932 has 48 MA's), (24, 30836), (42, 30722), (47, 30680), (58, 30524),

Gene: WunderPhul_49 Start: 30930, Stop: 30502, Start Num: 7
Candidate Starts for WunderPhul_49:
(Start: 4 @30957 has 2 MA's), (Start: 7 @30930 has 48 MA's), (24, 30834), (42, 30720), (47, 30678), (58, 30522),

Gene: Yokurt_49 Start: 30959, Stop: 30504, Start Num: 4
Candidate Starts for Yokurt_49:
(Start: 4 @30959 has 2 MA's), (Start: 7 @30932 has 48 MA's), (24, 30836), (42, 30722), (47, 30680), (58, 30524),

Gene: Zaka_49 Start: 30932, Stop: 30504, Start Num: 7
Candidate Starts for Zaka_49:
(Start: 4 @30959 has 2 MA's), (Start: 7 @30932 has 48 MA's), (24, 30836), (42, 30722), (47, 30680), (58, 30524),

Gene: Zulu_49 Start: 30732, Stop: 30304, Start Num: 7
Candidate Starts for Zulu_49:
(Start: 4 @30759 has 2 MA's), (Start: 7 @30732 has 48 MA's), (24, 30636), (42, 30522), (47, 30480), (58, 30324),