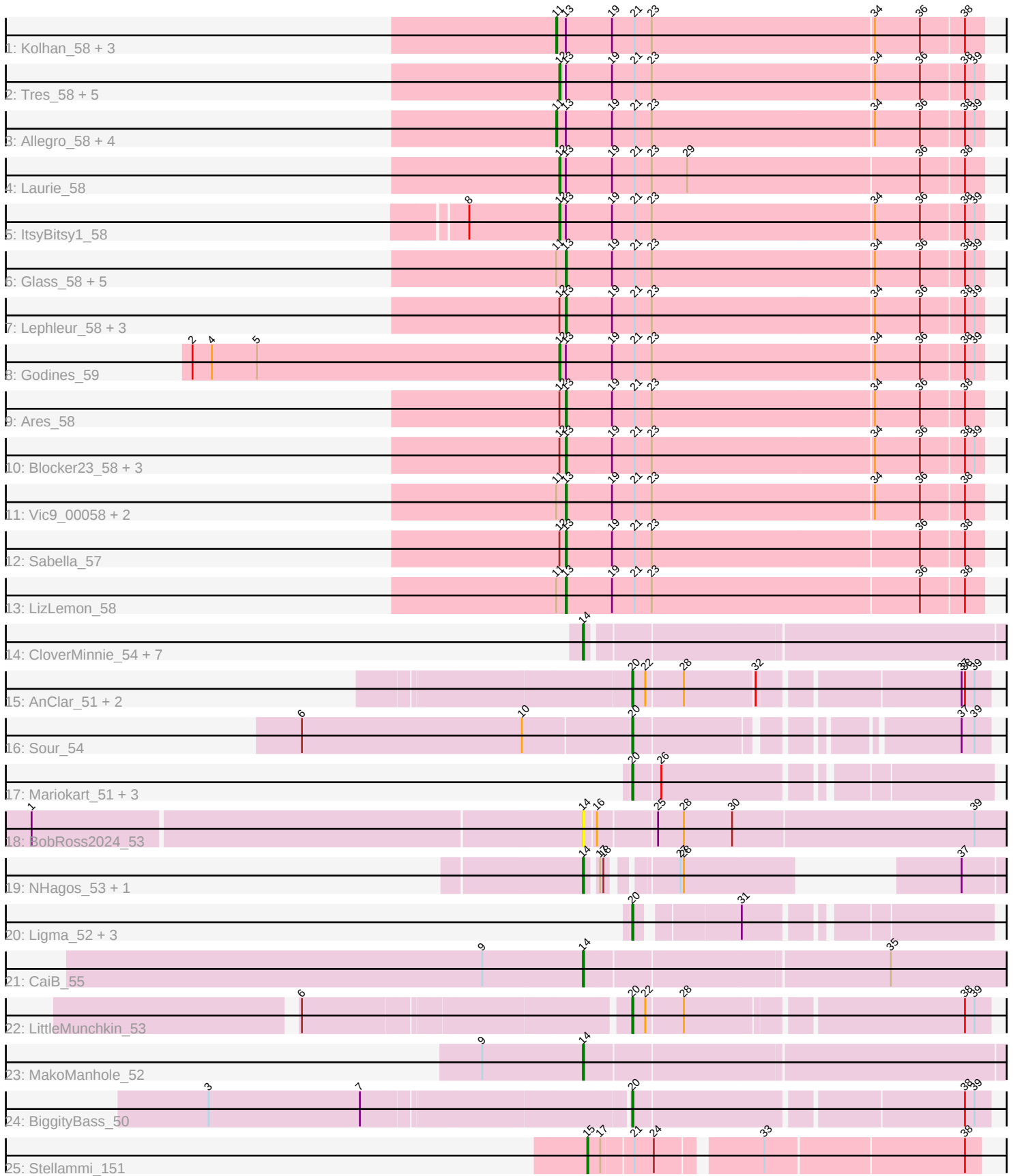


Pham 330844



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 330844 Report

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

Pham number 330844 has 66 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Kolhan_58, MasterPo_58, Coffee_58, LilSmirk_58
- Track 2 : Tres_58, Rosebush_57, Hedgerow_58, TA17A_59, Rhinoforte_58, Kaleb_58
- Track 3 : Allegro_58, Faze9_57, PrinceCharming_58, Eaglehorse_58, Phantasmagoria_58
- Track 4 : Laurie_58
- Track 5 : ItsyBitsy1_58
- Track 6 : Glass_58, Lars_58, Qyrzula_53, FrenchFry_58, Bananafish_58, Opia_58
- Track 7 : Lephleur_58, Tinciduntolum_59, Brownie5_58, West99_58
- Track 8 : Godines_59
- Track 9 : Ares_58
- Track 10 : Blocker23_58, Boyle_58, Kheth_58, Arbiter_57
- Track 11 : Vic9_00058, Calamitous_58, Holeinone_58
- Track 12 : Sabella_57
- Track 13 : LizLemon_58
- Track 14 : CloverMinnie_54, Blackpen_54, TraderJ_55, Wooper_55, FelixTres_54, Yeshua_55, MossRose_54, AnarQue_55
- Track 15 : AnClar_51, Sisko_50, Yago84_50
- Track 16 : Sour_54
- Track 17 : Mariokart_51, CharlottesWeb_51, Coco2012_51, JellyBelly_50
- Track 18 : BobRoss2024_53
- Track 19 : NHagos_53, AksarBAT_54
- Track 20 : Ligma_52, Fresco_52, Axumite_52, Shatter_52
- Track 21 : CaiB_55
- Track 22 : LittleMunchkin_53
- Track 23 : MakoManhole_52
- Track 24 : BiggityBass_50
- Track 25 : Stellammi_151

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

The start number called the most often in the published annotations is 13, it was called in 20 of the 59 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arbiter_57, Ares_58, Bananafish_58, Blocker23_58, Boyle_58, Brownie5_58, Calamitous_58, FrenchFry_58, Glass_58, Holeinone_58, Kheth_58, Lars_58, Lephleur_58, LizLemon_58, Opia_58, Qyrzula_53, Sabella_57, Tinciduntolum_59, Vic9_00058, West99_58,

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

- Allegro_58, Coffee_58, Eaglehorse_58, Faze9_57, Godines_59, Hedgerow_58, ItsyBitsy1_58, Kaleb_58, Kolhan_58, Laurie_58, LilSmirk_58, MasterPo_58, Phantasmagoria_58, PrinceCharming_58, Rhinoforte_58, Rosebush_57, TA17A_59, Tres_58,

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

- AksarBAT_54, AnClar_51, AnarQue_55, Axumite_52, BiggityBass_50, Blackpen_54, BobRoss2024_53, CaiB_55, CharlottesWeb_51, CloverMinnie_54, Coco2012_51, FelixTres_54, Fresco_52, JellyBelly_50, Ligma_52, LittleMunchkin_53, MakoManhole_52, Mariokart_51, MossRose_54, NHagos_53, Shatter_52, Sisko_50, Sour_54, Stellammi_151, TraderJ_55, Wooper_55, Yago84_50, Yeshua_55,

Summary by start number:

Start 11:

- Found in 19 of 66 (28.8%) of genes in pham
- Manual Annotations of this start: 8 of 59
- Called 47.4% of time when present
- Phage (with cluster) where this start called: Allegro_58 (B2), Coffee_58 (B2), Eaglehorse_58 (B2), Faze9_57 (B2), Kolhan_58 (B2), LilSmirk_58 (B2), MasterPo_58 (B2), Phantasmagoria_58 (B2), PrinceCharming_58 (B2),

Start 12:

- Found in 19 of 66 (28.8%) of genes in pham
- Manual Annotations of this start: 9 of 59
- Called 47.4% of time when present
- Phage (with cluster) where this start called: Godines_59 (B2), Hedgerow_58 (B2), ItsyBitsy1_58 (B2), Kaleb_58 (B2), Laurie_58 (B2), Rhinoforte_58 (B2), Rosebush_57 (B2), TA17A_59 (B2), Tres_58 (B2),

Start 13:

- Found in 38 of 66 (57.6%) of genes in pham
- Manual Annotations of this start: 20 of 59
- Called 52.6% of time when present
- Phage (with cluster) where this start called: Arbiter_57 (B2), Ares_58 (B2), Bananafish_58 (B2), Blocker23_58 (B2), Boyle_58 (B2), Brownie5_58 (B2), Calamitous_58 (B2), FrenchFry_58 (B2), Glass_58 (B2), Holeinone_58 (B2), Kheth_58 (B2), Lars_58 (B2), Lephleur_58 (B2), LizLemon_58 (B2), Opia_58 (B2), Qyrzula_53 (B2), Sabella_57 (B2), Tinciduntolum_59 (B2), Vic9_00058 (B2), West99_58 (B2),

Start 14:

- Found in 13 of 66 (19.7%) of genes in pham
- Manual Annotations of this start: 9 of 59
- Called 100.0% of time when present

- Phage (with cluster) where this start called: AksarBAT_54 (DR), AnarQue_55 (DR), Blackpen_54 (DR), BobRoss2024_53 (DR), CaiB_55 (DR), CloverMinnie_54 (DR), FelixTres_54 (DR), MakoManhole_52 (DR), MossRose_54 (DR), NHagos_53 (DR), TraderJ_55 (DR), Wooper_55 (DR), Yeshua_55 (DR),

Start 15:

- Found in 1 of 66 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 59
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Stellammi_151 (UNK),

Start 20:

- Found in 14 of 66 (21.2%) of genes in pham
- Manual Annotations of this start: 12 of 59
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnClar_51 (DR), Axumite_52 (DR), BiggityBass_50 (DR), CharlottesWeb_51 (DR), Coco2012_51 (DR), Fresco_52 (DR), JellyBelly_50 (DR), Ligma_52 (DR), LittleMunchkin_53 (DR), Mariokart_51 (DR), Shatter_52 (DR), Sisko_50 (DR), Sour_54 (DR), Yago84_50 (DR),

Summary by clusters:

There are 3 clusters represented in this pham: UNK, DR, B2,

Info for manual annotations of cluster B2:

- Start number 11 was manually annotated 8 times for cluster B2.
- Start number 12 was manually annotated 9 times for cluster B2.
- Start number 13 was manually annotated 20 times for cluster B2.

Info for manual annotations of cluster DR:

- Start number 14 was manually annotated 9 times for cluster DR.
- Start number 20 was manually annotated 12 times for cluster DR.

Info for manual annotations of cluster UNK:

- Start number 15 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: AksarBAT_54 Start: 47539, Stop: 47165, Start Num: 14

Candidate Starts for AksarBAT_54:

(Start: 14 @47539 has 9 MA's), (17, 47530), (18, 47527), (27, 47476), (28, 47473), (37, 47215),

Gene: Allegro_58 Start: 52863, Stop: 52474, Start Num: 11

Candidate Starts for Allegro_58:

(Start: 11 @52863 has 8 MA's), (Start: 13 @52854 has 20 MA's), (19, 52812), (21, 52791), (23, 52776), (34, 52572), (36, 52530), (38, 52491), (39, 52482),

Gene: AnClar_51 Start: 48276, Stop: 47968, Start Num: 20

Candidate Starts for AnClar_51:

(Start: 20 @48276 has 12 MA's), (22, 48264), (28, 48231), (32, 48168), (37, 47994), (38, 47991), (39, 47982),

Gene: AnarQue_55 Start: 48400, Stop: 48017, Start Num: 14

Candidate Starts for AnarQue_55:

(Start: 14 @48400 has 9 MA's),

Gene: Arbiter_57 Start: 52966, Stop: 52586, Start Num: 13

Candidate Starts for Arbiter_57:

(Start: 12 @52972 has 9 MA's), (Start: 13 @52966 has 20 MA's), (19, 52924), (21, 52903), (23, 52888), (34, 52684), (36, 52642), (38, 52603), (39, 52594),

Gene: Ares_58 Start: 52938, Stop: 52558, Start Num: 13

Candidate Starts for Ares_58:

(Start: 12 @52941 has 9 MA's), (Start: 13 @52938 has 20 MA's), (19, 52896), (21, 52875), (23, 52860), (34, 52656), (36, 52614), (38, 52575),

Gene: Axumite_52 Start: 46268, Stop: 45978, Start Num: 20

Candidate Starts for Axumite_52:

(Start: 20 @46268 has 12 MA's), (31, 46184),

Gene: Bananafish_58 Start: 52866, Stop: 52486, Start Num: 13

Candidate Starts for Bananafish_58:

(Start: 11 @52875 has 8 MA's), (Start: 13 @52866 has 20 MA's), (19, 52824), (21, 52803), (23, 52788), (34, 52584), (36, 52542), (38, 52503), (39, 52494),

Gene: BiggityBass_50 Start: 47644, Stop: 47330, Start Num: 20

Candidate Starts for BiggityBass_50:

(3, 48016), (7, 47875), (Start: 20 @47644 has 12 MA's), (38, 47353), (39, 47344),

Gene: Blackpen_54 Start: 47469, Stop: 47086, Start Num: 14

Candidate Starts for Blackpen_54:

(Start: 14 @47469 has 9 MA's),

Gene: Blocker23_58 Start: 52976, Stop: 52596, Start Num: 13

Candidate Starts for Blocker23_58:

(Start: 12 @52982 has 9 MA's), (Start: 13 @52976 has 20 MA's), (19, 52934), (21, 52913), (23, 52898), (34, 52694), (36, 52652), (38, 52613), (39, 52604),

Gene: BobRoss2024_53 Start: 46786, Stop: 46394, Start Num: 14

Candidate Starts for BobRoss2024_53:

(1, 47287), (Start: 14 @46786 has 9 MA's), (16, 46777), (25, 46726), (28, 46702), (30, 46657), (39, 46435),

Gene: Boyle_58 Start: 53005, Stop: 52625, Start Num: 13

Candidate Starts for Boyle_58:

(Start: 12 @53011 has 9 MA's), (Start: 13 @53005 has 20 MA's), (19, 52963), (21, 52942), (23, 52927), (34, 52723), (36, 52681), (38, 52642), (39, 52633),

Gene: Brownie5_58 Start: 53018, Stop: 52638, Start Num: 13

Candidate Starts for Brownie5_58:

(Start: 12 @53021 has 9 MA's), (Start: 13 @53018 has 20 MA's), (19, 52976), (21, 52955), (23, 52940), (34, 52736), (36, 52694), (38, 52655), (39, 52646),

Gene: CaiB_55 Start: 48933, Stop: 48541, Start Num: 14

Candidate Starts for CaiB_55:

(9, 49026), (Start: 14 @48933 has 9 MA's), (35, 48660),

Gene: Calamitous_58 Start: 52865, Stop: 52485, Start Num: 13

Candidate Starts for Calamitous_58:

(Start: 11 @52874 has 8 MA's), (Start: 13 @52865 has 20 MA's), (19, 52823), (21, 52802), (23, 52787), (34, 52583), (36, 52541), (38, 52502),

Gene: CharlottesWeb_51 Start: 45652, Stop: 45347, Start Num: 20

Candidate Starts for CharlottesWeb_51:

(Start: 20 @45652 has 12 MA's), (26, 45628),

Gene: CloverMinnie_54 Start: 47977, Stop: 47594, Start Num: 14

Candidate Starts for CloverMinnie_54:

(Start: 14 @47977 has 9 MA's),

Gene: Coco2012_51 Start: 45644, Stop: 45339, Start Num: 20

Candidate Starts for Coco2012_51:

(Start: 20 @45644 has 12 MA's), (26, 45620),

Gene: Coffee_58 Start: 52986, Stop: 52597, Start Num: 11

Candidate Starts for Coffee_58:

(Start: 11 @52986 has 8 MA's), (Start: 13 @52977 has 20 MA's), (19, 52935), (21, 52914), (23, 52899), (34, 52695), (36, 52653), (38, 52614),

Gene: Eaglehorse_58 Start: 52924, Stop: 52535, Start Num: 11

Candidate Starts for Eaglehorse_58:

(Start: 11 @52924 has 8 MA's), (Start: 13 @52915 has 20 MA's), (19, 52873), (21, 52852), (23, 52837), (34, 52633), (36, 52591), (38, 52552), (39, 52543),

Gene: Faze9_57 Start: 53009, Stop: 52620, Start Num: 11

Candidate Starts for Faze9_57:

(Start: 11 @53009 has 8 MA's), (Start: 13 @53000 has 20 MA's), (19, 52958), (21, 52937), (23, 52922), (34, 52718), (36, 52676), (38, 52637), (39, 52628),

Gene: FelixTres_54 Start: 48015, Stop: 47632, Start Num: 14

Candidate Starts for FelixTres_54:

(Start: 14 @48015 has 9 MA's),

Gene: FrenchFry_58 Start: 52976, Stop: 52596, Start Num: 13

Candidate Starts for FrenchFry_58:

(Start: 11 @52985 has 8 MA's), (Start: 13 @52976 has 20 MA's), (19, 52934), (21, 52913), (23, 52898), (34, 52694), (36, 52652), (38, 52613), (39, 52604),

Gene: Fresco_52 Start: 46268, Stop: 45978, Start Num: 20

Candidate Starts for Fresco_52:

(Start: 20 @46268 has 12 MA's), (31, 46184),

Gene: Glass_58 Start: 52978, Stop: 52598, Start Num: 13

Candidate Starts for Glass_58:

(Start: 11 @52987 has 8 MA's), (Start: 13 @52978 has 20 MA's), (19, 52936), (21, 52915), (23, 52900), (34, 52696), (36, 52654), (38, 52615), (39, 52606),

Gene: Godines_59 Start: 53267, Stop: 52881, Start Num: 12

Candidate Starts for Godines_59:

(2, 53609), (4, 53591), (5, 53549), (Start: 12 @53267 has 9 MA's), (Start: 13 @53261 has 20 MA's), (19, 53219), (21, 53198), (23, 53183), (34, 52979), (36, 52937), (38, 52898), (39, 52889),

Gene: Hedgerow_58 Start: 52996, Stop: 52613, Start Num: 12

Candidate Starts for Hedgerow_58:

(Start: 12 @52996 has 9 MA's), (Start: 13 @52993 has 20 MA's), (19, 52951), (21, 52930), (23, 52915), (34, 52711), (36, 52669), (38, 52630), (39, 52621),

Gene: Holeinone_58 Start: 52832, Stop: 52452, Start Num: 13

Candidate Starts for Holeinone_58:

(Start: 11 @52841 has 8 MA's), (Start: 13 @52832 has 20 MA's), (19, 52790), (21, 52769), (23, 52754), (34, 52550), (36, 52508), (38, 52469),

Gene: ItsyBitsy1_58 Start: 52861, Stop: 52475, Start Num: 12

Candidate Starts for ItsyBitsy1_58:

(8, 52945), (Start: 12 @52861 has 9 MA's), (Start: 13 @52855 has 20 MA's), (19, 52813), (21, 52792), (23, 52777), (34, 52573), (36, 52531), (38, 52492), (39, 52483),

Gene: JellyBelly_50 Start: 45650, Stop: 45345, Start Num: 20

Candidate Starts for JellyBelly_50:

(Start: 20 @45650 has 12 MA's), (26, 45626),

Gene: Kaleb_58 Start: 53020, Stop: 52634, Start Num: 12

Candidate Starts for Kaleb_58:

(Start: 12 @53020 has 9 MA's), (Start: 13 @53014 has 20 MA's), (19, 52972), (21, 52951), (23, 52936), (34, 52732), (36, 52690), (38, 52651), (39, 52642),

Gene: Kheth_58 Start: 52897, Stop: 52517, Start Num: 13

Candidate Starts for Kheth_58:

(Start: 12 @52903 has 9 MA's), (Start: 13 @52897 has 20 MA's), (19, 52855), (21, 52834), (23, 52819), (34, 52615), (36, 52573), (38, 52534), (39, 52525),

Gene: Kolhan_58 Start: 52873, Stop: 52484, Start Num: 11

Candidate Starts for Kolhan_58:

(Start: 11 @52873 has 8 MA's), (Start: 13 @52864 has 20 MA's), (19, 52822), (21, 52801), (23, 52786), (34, 52582), (36, 52540), (38, 52501),

Gene: Lars_58 Start: 52962, Stop: 52582, Start Num: 13

Candidate Starts for Lars_58:

(Start: 11 @52971 has 8 MA's), (Start: 13 @52962 has 20 MA's), (19, 52920), (21, 52899), (23, 52884), (34, 52680), (36, 52638), (38, 52599), (39, 52590),

Gene: Laurie_58 Start: 52695, Stop: 52309, Start Num: 12

Candidate Starts for Laurie_58:

(Start: 12 @52695 has 9 MA's), (Start: 13 @52689 has 20 MA's), (19, 52647), (21, 52626), (23, 52611), (29, 52578), (36, 52365), (38, 52326),

Gene: Lephleur_58 Start: 52874, Stop: 52494, Start Num: 13

Candidate Starts for Lephleur_58:

(Start: 12 @52877 has 9 MA's), (Start: 13 @52874 has 20 MA's), (19, 52832), (21, 52811), (23, 52796), (34, 52592), (36, 52550), (38, 52511), (39, 52502),

Gene: Ligma_52 Start: 46268, Stop: 45978, Start Num: 20

Candidate Starts for Ligma_52:

(Start: 20 @46268 has 12 MA's), (31, 46184),

Gene: LilSmirk_58 Start: 52874, Stop: 52485, Start Num: 11

Candidate Starts for LilSmirk_58:

(Start: 11 @52874 has 8 MA's), (Start: 13 @52865 has 20 MA's), (19, 52823), (21, 52802), (23, 52787), (34, 52583), (36, 52541), (38, 52502),

Gene: LittleMunchkin_53 Start: 48964, Stop: 48653, Start Num: 20

Candidate Starts for LittleMunchkin_53:

(6, 49246), (Start: 20 @48964 has 12 MA's), (22, 48952), (28, 48919), (38, 48676), (39, 48667),

Gene: LizLemon_58 Start: 52987, Stop: 52607, Start Num: 13

Candidate Starts for LizLemon_58:

(Start: 11 @52996 has 8 MA's), (Start: 13 @52987 has 20 MA's), (19, 52945), (21, 52924), (23, 52909), (36, 52663), (38, 52624),

Gene: MakoManhole_52 Start: 47472, Stop: 47083, Start Num: 14

Candidate Starts for MakoManhole_52:

(9, 47565), (Start: 14 @47472 has 9 MA's),

Gene: Mariokart_51 Start: 45938, Stop: 45633, Start Num: 20

Candidate Starts for Mariokart_51:

(Start: 20 @45938 has 12 MA's), (26, 45914),

Gene: MasterPo_58 Start: 52892, Stop: 52503, Start Num: 11

Candidate Starts for MasterPo_58:

(Start: 11 @52892 has 8 MA's), (Start: 13 @52883 has 20 MA's), (19, 52841), (21, 52820), (23, 52805), (34, 52601), (36, 52559), (38, 52520),

Gene: MossRose_54 Start: 48034, Stop: 47651, Start Num: 14

Candidate Starts for MossRose_54:

(Start: 14 @48034 has 9 MA's),

Gene: NHagos_53 Start: 46811, Stop: 46533, Start Num: 14

Candidate Starts for NHagos_53:

(Start: 14 @46811 has 9 MA's), (17, 46802), (18, 46799), (27, 46748), (28, 46745), (37, 46583),

Gene: Opia_58 Start: 52877, Stop: 52497, Start Num: 13

Candidate Starts for Opia_58:

(Start: 11 @52886 has 8 MA's), (Start: 13 @52877 has 20 MA's), (19, 52835), (21, 52814), (23, 52799), (34, 52595), (36, 52553), (38, 52514), (39, 52505),

Gene: Phantasmagoria_58 Start: 52884, Stop: 52495, Start Num: 11

Candidate Starts for Phantasmagoria_58:

(Start: 11 @52884 has 8 MA's), (Start: 13 @52875 has 20 MA's), (19, 52833), (21, 52812), (23, 52797), (34, 52593), (36, 52551), (38, 52512), (39, 52503),

Gene: PrinceCharming_58 Start: 52980, Stop: 52591, Start Num: 11

Candidate Starts for PrinceCharming_58:

(Start: 11 @52980 has 8 MA's), (Start: 13 @52971 has 20 MA's), (19, 52929), (21, 52908), (23, 52893), (34, 52689), (36, 52647), (38, 52608), (39, 52599),

Gene: Qyrzula_53 Start: 52988, Stop: 52608, Start Num: 13

Candidate Starts for Qyrzula_53:

(Start: 11 @52997 has 8 MA's), (Start: 13 @52988 has 20 MA's), (19, 52946), (21, 52925), (23, 52910), (34, 52706), (36, 52664), (38, 52625), (39, 52616),

Gene: Rhinoforte_58 Start: 52990, Stop: 52607, Start Num: 12

Candidate Starts for Rhinoforte_58:

(Start: 12 @52990 has 9 MA's), (Start: 13 @52987 has 20 MA's), (19, 52945), (21, 52924), (23, 52909), (34, 52705), (36, 52663), (38, 52624), (39, 52615),

Gene: Rosebush_57 Start: 53017, Stop: 52634, Start Num: 12

Candidate Starts for Rosebush_57:

(Start: 12 @53017 has 9 MA's), (Start: 13 @53014 has 20 MA's), (19, 52972), (21, 52951), (23, 52936), (34, 52732), (36, 52690), (38, 52651), (39, 52642),

Gene: Sabella_57 Start: 52859, Stop: 52479, Start Num: 13

Candidate Starts for Sabella_57:

(Start: 12 @52862 has 9 MA's), (Start: 13 @52859 has 20 MA's), (19, 52817), (21, 52796), (23, 52781), (36, 52535), (38, 52496),

Gene: Shatter_52 Start: 46268, Stop: 45978, Start Num: 20

Candidate Starts for Shatter_52:

(Start: 20 @46268 has 12 MA's), (31, 46184),

Gene: Sisko_50 Start: 46279, Stop: 45971, Start Num: 20

Candidate Starts for Sisko_50:

(Start: 20 @46279 has 12 MA's), (22, 46267), (28, 46234), (32, 46171), (37, 45997), (38, 45994), (39, 45985),

Gene: Sour_54 Start: 49450, Stop: 49163, Start Num: 20

Candidate Starts for Sour_54:

(6, 49750), (10, 49546), (Start: 20 @49450 has 12 MA's), (37, 49189), (39, 49177),

Gene: Stellammi_151 Start: 69852, Stop: 70190, Start Num: 15

Candidate Starts for Stellammi_151:

(Start: 15 @69852 has 1 MA's), (17, 69864), (21, 69891), (24, 69909), (33, 69996), (38, 70176),

Gene: TA17A_59 Start: 52867, Stop: 52481, Start Num: 12

Candidate Starts for TA17A_59:

(Start: 12 @52867 has 9 MA's), (Start: 13 @52861 has 20 MA's), (19, 52819), (21, 52798), (23, 52783), (34, 52579), (36, 52537), (38, 52498), (39, 52489),

Gene: Tinciduntolum_59 Start: 53017, Stop: 52637, Start Num: 13

Candidate Starts for Tinciduntolum_59:

(Start: 12 @53020 has 9 MA's), (Start: 13 @53017 has 20 MA's), (19, 52975), (21, 52954), (23, 52939), (34, 52735), (36, 52693), (38, 52654), (39, 52645),

Gene: TraderJ_55 Start: 48357, Stop: 47974, Start Num: 14

Candidate Starts for TraderJ_55:

(Start: 14 @48357 has 9 MA's),

Gene: Tres_58 Start: 52874, Stop: 52491, Start Num: 12

Candidate Starts for Tres_58:

(Start: 12 @52874 has 9 MA's), (Start: 13 @52871 has 20 MA's), (19, 52829), (21, 52808), (23, 52793), (34, 52589), (36, 52547), (38, 52508), (39, 52499),

Gene: Vic9_00058 Start: 53713, Stop: 53333, Start Num: 13

Candidate Starts for Vic9_00058:

(Start: 11 @53722 has 8 MA's), (Start: 13 @53713 has 20 MA's), (19, 53671), (21, 53650), (23, 53635), (34, 53431), (36, 53389), (38, 53350),

Gene: West99_58 Start: 53014, Stop: 52634, Start Num: 13

Candidate Starts for West99_58:

(Start: 12 @53017 has 9 MA's), (Start: 13 @53014 has 20 MA's), (19, 52972), (21, 52951), (23, 52936), (34, 52732), (36, 52690), (38, 52651), (39, 52642),

Gene: Wooper_55 Start: 48366, Stop: 47983, Start Num: 14

Candidate Starts for Wooper_55:

(Start: 14 @48366 has 9 MA's),

Gene: Yago84_50 Start: 46354, Stop: 46046, Start Num: 20

Candidate Starts for Yago84_50:

(Start: 20 @46354 has 12 MA's), (22, 46342), (28, 46309), (32, 46246), (37, 46072), (38, 46069), (39, 46060),

Gene: Yeshua_55 Start: 48343, Stop: 47960, Start Num: 14

Candidate Starts for Yeshua_55:

(Start: 14 @48343 has 9 MA's),