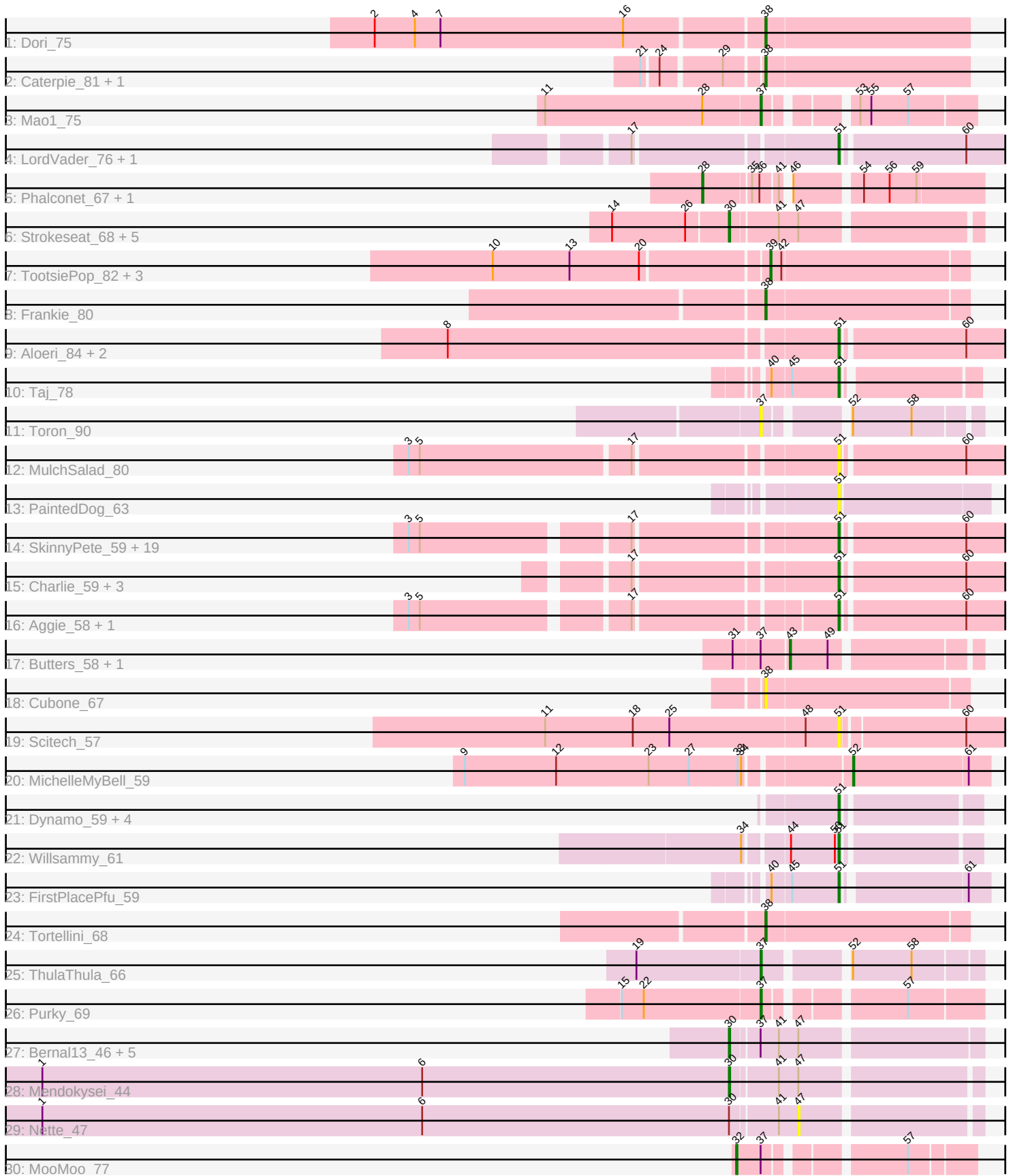


Pham 330781



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 330781 Report

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

Pham number 330781 has 76 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Dori_75
- Track 2 : Caterpie_81, Sejanus_78
- Track 3 : Mao1_75
- Track 4 : LordVader_76, Piper2020_86
- Track 5 : Phalconet_67, PhesterPhotato_72
- Track 6 : Strokeseat_68, Minnie_70, Mandlovu_68, Sandalphon_68, Hlubikazi_68, Phrann_58
- Track 7 : TootsiePop_82, Misha28_82, Awesomesauce_83, LilSpotty_79
- Track 8 : Frankie_80
- Track 9 : Aloeri_84, ChickenDinner_83, DocMcStuffins_80
- Track 10 : Taj_78
- Track 11 : Toron_90
- Track 12 : MulchSalad_80
- Track 13 : PaintedDog_63
- Track 14 : SkinnyPete_59, Melville_67, Magsby_61, FirstPlacePfu_64, Chewbacca_65, Tessdabest_63, Schnauzer_63, Philonius_62, Duplicity_60, Smurph_62, Silvafighter_64, EGUnicorn_57, Phloss_60, Fulbright_60, Tortoise12_62, Carcharodon_62, Xerxes_62, Pipsqueaks_63, Parmesanjohn_62, Gex_63
- Track 15 : Charlie_59, Tapioca_60, Bosection6_57, Andies_56
- Track 16 : Aggie_58, Silvy_58
- Track 17 : Butters_58, Rubeelu_58
- Track 18 : Cubone_67
- Track 19 : Scitech_57
- Track 20 : MichelleMyBell_59
- Track 21 : Dynamo_59, Sonah_60, Bhagsy_65, HUHilltop_62, Jebeks_60
- Track 22 : Willsammy_61
- Track 23 : FirstPlacePfu_59
- Track 24 : Tortellini_68
- Track 25 : ThulaThula_66
- Track 26 : Purky_69
- Track 27 : Bernal13_46, ZenTime222_45, Ibrahim_46, RonRayGun_46, Whitty_45, Nairb_45
- Track 28 : Mendokysei_44
- Track 29 : Nette_47
- Track 30 : MooMoo_77

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

The start number called the most often in the published annotations is 51, it was called in 38 of the 68 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aggie_58, Aloeri_84, Andies_56, Bhagsy_65, Bosection6_57, Carcharodon_62, Charlie_59, Chewbacca_65, ChickenDinner_83, DocMcStuffins_80, Duplicity_60, Dynamo_59, EGUunicorn_57, FirstPlacePfu_59, FirstPlacePfu_64, Fulbright_60, Gex_63, HUHilltop_62, Jebeks_60, LordVader_76, Magsby_61, Melville_67, MulchSalad_80, PaintedDog_63, Parmesanjohn_62, Philonius_62, Phloss_60, Piper2020_86, Pipsqueaks_63, Schnauzer_63, Scitech_57, Silvafighter_64, Silvy_58, SkinnyPete_59, Smurph_62, Sonah_60, Taj_78, Tapioca_60, Tessdabest_63, Tortoise12_62, Willsammy_61, Xerxes_62,

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

-

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

- Awesomesauce_83, Bernal13_46, Butters_58, Caterpie_81, Cubone_67, Dori_75, Frankie_80, Hlubikazi_68, Ibrahim_46, LilSpotty_79, Mandlovu_68, Mao1_75, Mendokysei_44, MichelleMyBell_59, Minnie_70, Misha28_82, MooMoo_77, Nairb_45, Nette_47, Phalconet_67, PhesterPhotato_72, Phrann_58, Purky_69, RonRayGun_46, Rubeelu_58, Sandalphon_68, Sejanus_78, Strokeseat_68, ThulaThula_66, TootsiePop_82, Toron_90, Tortellini_68, Whitty_45, ZenTime222_45,

Summary by start number:

Start 28:

- Found in 3 of 76 (3.9%) of genes in pham
- Manual Annotations of this start: 2 of 68
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phalconet_67 (F1), PhesterPhotato_72 (F1),

Start 30:

- Found in 14 of 76 (18.4%) of genes in pham
- Manual Annotations of this start: 13 of 68
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Bernal13_46 (T), Hlubikazi_68 (F1), Ibrahim_46 (T), Mandlovu_68 (F1), Mendokysei_44 (T), Minnie_70 (F1), Nairb_45 (T), Phrann_58 (N), RonRayGun_46 (T), Sandalphon_68 (F1), Strokeseat_68 (F1), Whitty_45 (T), ZenTime222_45 (T),

Start 32:

- Found in 1 of 76 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 68
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MooMoo_77 (singleton),

Start 37:

- Found in 13 of 76 (17.1%) of genes in pham

- Manual Annotations of this start: 3 of 68
- Called 30.8% of time when present
- Phage (with cluster) where this start called: Mao1_75 (AD), Purky_69 (P6), ThulaThula_66 (P5), Toron_90 (F6),

Start 38:

- Found in 6 of 76 (7.9%) of genes in pham
- Manual Annotations of this start: 4 of 68
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caterpie_81 (AD), Cubone_67 (N), Dori_75 (AD), Frankie_80 (F1), Sejanus_78 (AD), Tortellini_68 (P2),

Start 39:

- Found in 4 of 76 (5.3%) of genes in pham
- Manual Annotations of this start: 4 of 68
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Awesomesauce_83 (F1), LilSpotty_79 (singleton), Misha28_82 (F1), TootsiePop_82 (F1),

Start 43:

- Found in 2 of 76 (2.6%) of genes in pham
- Manual Annotations of this start: 2 of 68
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Butters_58 (N), Rubeelu_58 (N),

Start 47:

- Found in 14 of 76 (18.4%) of genes in pham
- No Manual Annotations of this start.
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Nette_47 (T),

Start 51:

- Found in 42 of 76 (55.3%) of genes in pham
- Manual Annotations of this start: 38 of 68
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aggie_58 (N), Aloeri_84 (F1), Andies_56 (N), Bhagsy_65 (P1), Bosection6_57 (N), Carcharodon_62 (N), Charlie_59 (N), Chewbacca_65 (N), ChickenDinner_83 (F1), DocMcStuffs_80 (F1), Duplicity_60 (N), Dynamo_59 (P1), EGUnicorn_57 (N), FirstPlacePfu_59 (P1), FirstPlacePfu_64 (P1), Fulbright_60 (N), Gex_63 (N), HUHilltop_62 (P1), Jebeks_60 (P1), LordVader_76 (F), Magsby_61 (N), Melville_67 (N), MulchSalad_80 (F7), PaintedDog_63 (I1), Parmesanjohn_62 (N), Philonius_62 (N), Phloss_60 (N), Piper2020_86 (F1), Pipsqueaks_63 (N), Schnauzer_63 (N), Scitech_57 (N), Silvafighter_64 (N), Silvy_58 (N), SkinnyPete_59 (N), Smurph_62 (N), Sonah_60 (P1), Taj_78 (F1), Tapioca_60 (N), Tessdabest_63 (N), Tortoise12_62 (N), Willsammy_61 (P1), Xerxes_62 (N),

Start 52:

- Found in 3 of 76 (3.9%) of genes in pham
- Manual Annotations of this start: 1 of 68
- Called 33.3% of time when present
- Phage (with cluster) where this start called: MichelleMyBell_59 (N),

Summary by clusters:

There are 13 clusters represented in this pham: P2, F1, singleton, P1, P6, AD, F6, F7, I1, F, P5, N, T,

Info for manual annotations of cluster AD:

- Start number 37 was manually annotated 1 time for cluster AD.
- Start number 38 was manually annotated 2 times for cluster AD.

Info for manual annotations of cluster F:

- Start number 51 was manually annotated 1 time for cluster F.

Info for manual annotations of cluster F1:

- Start number 28 was manually annotated 2 times for cluster F1.
- Start number 30 was manually annotated 5 times for cluster F1.
- Start number 38 was manually annotated 1 time for cluster F1.
- Start number 39 was manually annotated 3 times for cluster F1.
- Start number 51 was manually annotated 5 times for cluster F1.

Info for manual annotations of cluster N:

- Start number 30 was manually annotated 1 time for cluster N.
- Start number 43 was manually annotated 2 times for cluster N.
- Start number 51 was manually annotated 24 times for cluster N.
- Start number 52 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P1:

- Start number 51 was manually annotated 8 times for cluster P1.

Info for manual annotations of cluster P2:

- Start number 38 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P5:

- Start number 37 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:

- Start number 37 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster T:

- Start number 30 was manually annotated 7 times for cluster T.

Gene Information:

Gene: Aggie_58 Start: 39856, Stop: 39999, Start Num: 51

Candidate Starts for Aggie_58:

(3, 39541), (5, 39550), (17, 39706), (Start: 51 @39856 has 38 MA's), (60, 39952),

Gene: Aloeri_84 Start: 50246, Stop: 50389, Start Num: 51

Candidate Starts for Aloeri_84:

(8, 49937), (Start: 51 @50246 has 38 MA's), (60, 50342),

Gene: Andies_56 Start: 39301, Stop: 39444, Start Num: 51

Candidate Starts for Andies_56:

(17, 39148), (Start: 51 @39301 has 38 MA's), (60, 39397),

Gene: Awesomesauce_83 Start: 50467, Stop: 50625, Start Num: 39

Candidate Starts for Awesomesauce_83:

(10, 50251), (13, 50314), (20, 50371), (Start: 39 @50467 has 4 MA's), (42, 50476),

Gene: Bernal13_46 Start: 34733, Stop: 34924, Start Num: 30

Candidate Starts for Bernal13_46:

(Start: 30 @34733 has 13 MA's), (Start: 37 @34754 has 3 MA's), (41, 34769), (47, 34784),

Gene: Bhagsy_65 Start: 41269, Stop: 41373, Start Num: 51

Candidate Starts for Bhagsy_65:

(Start: 51 @41269 has 38 MA's),

Gene: Bosection6_57 Start: 38905, Stop: 39048, Start Num: 51

Candidate Starts for Bosection6_57:

(17, 38752), (Start: 51 @38905 has 38 MA's), (60, 39001),

Gene: Butters_58 Start: 37292, Stop: 37432, Start Num: 43

Candidate Starts for Butters_58:

(31, 37250), (Start: 37 @37271 has 3 MA's), (Start: 43 @37292 has 2 MA's), (49, 37322),

Gene: Carcharodon_62 Start: 39203, Stop: 39346, Start Num: 51

Candidate Starts for Carcharodon_62:

(3, 38885), (5, 38894), (17, 39050), (Start: 51 @39203 has 38 MA's), (60, 39299),

Gene: Caterpie_81 Start: 55418, Stop: 55582, Start Num: 38

Candidate Starts for Caterpie_81:

(21, 55334), (24, 55346), (29, 55391), (Start: 38 @55418 has 4 MA's),

Gene: Charlie_59 Start: 38529, Stop: 38672, Start Num: 51

Candidate Starts for Charlie_59:

(17, 38376), (Start: 51 @38529 has 38 MA's), (60, 38625),

Gene: Chewbacca_65 Start: 39098, Stop: 39241, Start Num: 51

Candidate Starts for Chewbacca_65:

(3, 38780), (5, 38789), (17, 38945), (Start: 51 @39098 has 38 MA's), (60, 39194),

Gene: ChickenDinner_83 Start: 50246, Stop: 50389, Start Num: 51

Candidate Starts for ChickenDinner_83:

(8, 49937), (Start: 51 @50246 has 38 MA's), (60, 50342),

Gene: Cubone_67 Start: 39807, Stop: 39968, Start Num: 38

Candidate Starts for Cubone_67:

(Start: 38 @39807 has 4 MA's),

Gene: DocMcStuffins_80 Start: 51876, Stop: 52019, Start Num: 51

Candidate Starts for DocMcStuffins_80:

(8, 51567), (Start: 51 @51876 has 38 MA's), (60, 51972),

Gene: Dori_75 Start: 56198, Stop: 56362, Start Num: 38

Candidate Starts for Dori_75:

(2, 55886), (4, 55919), (7, 55940), (16, 56090), (Start: 38 @56198 has 4 MA's),

Gene: Duplicity_60 Start: 38460, Stop: 38603, Start Num: 51

Candidate Starts for Duplicity_60:

(3, 38142), (5, 38151), (17, 38307), (Start: 51 @38460 has 38 MA's), (60, 38556),

Gene: Dynamo_59 Start: 39180, Stop: 39284, Start Num: 51

Candidate Starts for Dynamo_59:

(Start: 51 @39180 has 38 MA's),

Gene: EGUunicorn_57 Start: 37526, Stop: 37669, Start Num: 51

Candidate Starts for EGUunicorn_57:

(3, 37208), (5, 37217), (17, 37373), (Start: 51 @37526 has 38 MA's), (60, 37622),

Gene: FirstPlacePfu_64 Start: 39003, Stop: 39146, Start Num: 51

Candidate Starts for FirstPlacePfu_64:

(3, 38685), (5, 38694), (17, 38850), (Start: 51 @39003 has 38 MA's), (60, 39099),

Gene: FirstPlacePfu_59 Start: 37654, Stop: 37764, Start Num: 51

Candidate Starts for FirstPlacePfu_59:

(40, 37603), (45, 37618), (Start: 51 @37654 has 38 MA's), (61, 37747),

Gene: Frankie_80 Start: 47540, Stop: 47701, Start Num: 38

Candidate Starts for Frankie_80:

(Start: 38 @47540 has 4 MA's),

Gene: Fulbright_60 Start: 37897, Stop: 38040, Start Num: 51

Candidate Starts for Fulbright_60:

(3, 37579), (5, 37588), (17, 37744), (Start: 51 @37897 has 38 MA's), (60, 37993),

Gene: Gex_63 Start: 39219, Stop: 39362, Start Num: 51

Candidate Starts for Gex_63:

(3, 38901), (5, 38910), (17, 39066), (Start: 51 @39219 has 38 MA's), (60, 39315),

Gene: HUHilltop_62 Start: 39403, Stop: 39507, Start Num: 51

Candidate Starts for HUHilltop_62:

(Start: 51 @39403 has 38 MA's),

Gene: Hlubikazi_68 Start: 44082, Stop: 44270, Start Num: 30

Candidate Starts for Hlubikazi_68:

(14, 43989), (26, 44049), (Start: 30 @44082 has 13 MA's), (41, 44118), (47, 44133),

Gene: Ibrahim_46 Start: 35179, Stop: 35370, Start Num: 30

Candidate Starts for Ibrahim_46:

(Start: 30 @35179 has 13 MA's), (Start: 37 @35200 has 3 MA's), (41, 35215), (47, 35230),

Gene: Jebeks_60 Start: 38700, Stop: 38804, Start Num: 51

Candidate Starts for Jebeks_60:

(Start: 51 @38700 has 38 MA's),

Gene: LilSpotty_79 Start: 45907, Stop: 46065, Start Num: 39
Candidate Starts for LilSpotty_79:
(10, 45691), (13, 45754), (20, 45811), (Start: 39 @45907 has 4 MA's), (42, 45916),

Gene: LordVader_76 Start: 46472, Stop: 46615, Start Num: 51
Candidate Starts for LordVader_76:
(17, 46319), (Start: 51 @46472 has 38 MA's), (60, 46568),

Gene: Magsby_61 Start: 39165, Stop: 39308, Start Num: 51
Candidate Starts for Magsby_61:
(3, 38847), (5, 38856), (17, 39012), (Start: 51 @39165 has 38 MA's), (60, 39261),

Gene: Mandlovu_68 Start: 44024, Stop: 44212, Start Num: 30
Candidate Starts for Mandlovu_68:
(14, 43931), (26, 43991), (Start: 30 @44024 has 13 MA's), (41, 44060), (47, 44075),

Gene: Mao1_75 Start: 54531, Stop: 54680, Start Num: 37
Candidate Starts for Mao1_75:
(11, 54357), (Start: 28 @54486 has 2 MA's), (Start: 37 @54531 has 3 MA's), (53, 54588), (55, 54597),
(57, 54627),

Gene: Melville_67 Start: 38774, Stop: 38917, Start Num: 51
Candidate Starts for Melville_67:
(3, 38456), (5, 38465), (17, 38621), (Start: 51 @38774 has 38 MA's), (60, 38870),

Gene: Mendokysei_44 Start: 34285, Stop: 34473, Start Num: 30
Candidate Starts for Mendokysei_44:
(1, 33721), (6, 34033), (Start: 30 @34285 has 13 MA's), (41, 34321), (47, 34336),

Gene: MichelleMyBell_59 Start: 37278, Stop: 37388, Start Num: 52
Candidate Starts for MichelleMyBell_59:
(9, 36978), (12, 37053), (23, 37128), (27, 37161), (33, 37200), (34, 37203), (Start: 52 @37278 has 1 MA's), (61, 37371),

Gene: Minnie_70 Start: 47983, Stop: 48171, Start Num: 30
Candidate Starts for Minnie_70:
(14, 47890), (26, 47950), (Start: 30 @47983 has 13 MA's), (41, 48019), (47, 48034),

Gene: Misha28_82 Start: 51166, Stop: 51324, Start Num: 39
Candidate Starts for Misha28_82:
(10, 50950), (13, 51013), (20, 51070), (Start: 39 @51166 has 4 MA's), (42, 51175),

Gene: MooMoo_77 Start: 47555, Stop: 47719, Start Num: 32
Candidate Starts for MooMoo_77:
(Start: 32 @47555 has 1 MA's), (Start: 37 @47573 has 3 MA's), (57, 47669),

Gene: MulchSalad_80 Start: 48222, Stop: 48365, Start Num: 51
Candidate Starts for MulchSalad_80:
(3, 47892), (5, 47901), (17, 48069), (Start: 51 @48222 has 38 MA's), (60, 48318),

Gene: Nairb_45 Start: 34733, Stop: 34924, Start Num: 30
Candidate Starts for Nairb_45:
(Start: 30 @34733 has 13 MA's), (Start: 37 @34754 has 3 MA's), (41, 34769), (47, 34784),

Gene: Nette_47 Start: 34345, Stop: 34482, Start Num: 47

Candidate Starts for Nette_47:

(1, 33730), (6, 34042), (Start: 30 @34294 has 13 MA's), (41, 34330), (47, 34345),

Gene: PaintedDog_63 Start: 41375, Stop: 41494, Start Num: 51

Candidate Starts for PaintedDog_63:

(Start: 51 @41375 has 38 MA's),

Gene: Parmesanjohn_62 Start: 39223, Stop: 39366, Start Num: 51

Candidate Starts for Parmesanjohn_62:

(3, 38905), (5, 38914), (17, 39070), (Start: 51 @39223 has 38 MA's), (60, 39319),

Gene: Phalconet_67 Start: 43045, Stop: 43245, Start Num: 28

Candidate Starts for Phalconet_67:

(Start: 28 @43045 has 2 MA's), (35, 43081), (36, 43087), (41, 43099), (46, 43102), (54, 43150), (56, 43171), (59, 43192),

Gene: PhesterPhotato_72 Start: 44766, Stop: 44963, Start Num: 28

Candidate Starts for PhesterPhotato_72:

(Start: 28 @44766 has 2 MA's), (35, 44802), (36, 44808), (41, 44820), (46, 44823), (54, 44871), (56, 44892), (59, 44913),

Gene: Philonius_62 Start: 39388, Stop: 39531, Start Num: 51

Candidate Starts for Philonius_62:

(3, 39070), (5, 39079), (17, 39235), (Start: 51 @39388 has 38 MA's), (60, 39484),

Gene: Phloss_60 Start: 38630, Stop: 38773, Start Num: 51

Candidate Starts for Phloss_60:

(3, 38312), (5, 38321), (17, 38477), (Start: 51 @38630 has 38 MA's), (60, 38726),

Gene: Phrann_58 Start: 40465, Stop: 40653, Start Num: 30

Candidate Starts for Phrann_58:

(14, 40372), (26, 40432), (Start: 30 @40465 has 13 MA's), (41, 40501), (47, 40516),

Gene: Piper2020_86 Start: 51987, Stop: 52130, Start Num: 51

Candidate Starts for Piper2020_86:

(17, 51834), (Start: 51 @51987 has 38 MA's), (60, 52083),

Gene: Pipsqueaks_63 Start: 39201, Stop: 39344, Start Num: 51

Candidate Starts for Pipsqueaks_63:

(3, 38883), (5, 38892), (17, 39048), (Start: 51 @39201 has 38 MA's), (60, 39297),

Gene: Purky_69 Start: 44331, Stop: 44486, Start Num: 37

Candidate Starts for Purky_69:

(15, 44220), (22, 44238), (Start: 37 @44331 has 3 MA's), (57, 44427),

Gene: RonRayGun_46 Start: 35179, Stop: 35370, Start Num: 30

Candidate Starts for RonRayGun_46:

(Start: 30 @35179 has 13 MA's), (Start: 37 @35200 has 3 MA's), (41, 35215), (47, 35230),

Gene: Rubeelu_58 Start: 37292, Stop: 37432, Start Num: 43

Candidate Starts for Rubeelu_58:

(31, 37250), (Start: 37 @37271 has 3 MA's), (Start: 43 @37292 has 2 MA's), (49, 37322),

Gene: Sandalphon_68 Start: 45968, Stop: 46156, Start Num: 30

Candidate Starts for Sandalphon_68:

(14, 45875), (26, 45935), (Start: 30 @45968 has 13 MA's), (41, 46004), (47, 46019),

Gene: Schnauzer_63 Start: 39223, Stop: 39366, Start Num: 51

Candidate Starts for Schnauzer_63:

(3, 38905), (5, 38914), (17, 39070), (Start: 51 @39223 has 38 MA's), (60, 39319),

Gene: Scitech_57 Start: 38626, Stop: 38769, Start Num: 51

Candidate Starts for Scitech_57:

(11, 38389), (18, 38461), (25, 38491), (48, 38599), (Start: 51 @38626 has 38 MA's), (60, 38722),

Gene: Sejanus_78 Start: 56346, Stop: 56510, Start Num: 38

Candidate Starts for Sejanus_78:

(21, 56262), (24, 56274), (29, 56319), (Start: 38 @56346 has 4 MA's),

Gene: Silvafighter_64 Start: 38766, Stop: 38909, Start Num: 51

Candidate Starts for Silvafighter_64:

(3, 38448), (5, 38457), (17, 38613), (Start: 51 @38766 has 38 MA's), (60, 38862),

Gene: Silvy_58 Start: 39856, Stop: 39999, Start Num: 51

Candidate Starts for Silvy_58:

(3, 39541), (5, 39550), (17, 39706), (Start: 51 @39856 has 38 MA's), (60, 39952),

Gene: SkinnyPete_59 Start: 38970, Stop: 39113, Start Num: 51

Candidate Starts for SkinnyPete_59:

(3, 38652), (5, 38661), (17, 38817), (Start: 51 @38970 has 38 MA's), (60, 39066),

Gene: Smurph_62 Start: 39223, Stop: 39366, Start Num: 51

Candidate Starts for Smurph_62:

(3, 38905), (5, 38914), (17, 39070), (Start: 51 @39223 has 38 MA's), (60, 39319),

Gene: Sonah_60 Start: 38874, Stop: 38978, Start Num: 51

Candidate Starts for Sonah_60:

(Start: 51 @38874 has 38 MA's),

Gene: Strokeseat_68 Start: 44081, Stop: 44269, Start Num: 30

Candidate Starts for Strokeseat_68:

(14, 43988), (26, 44048), (Start: 30 @44081 has 13 MA's), (41, 44117), (47, 44132),

Gene: Taj_78 Start: 46564, Stop: 46665, Start Num: 51

Candidate Starts for Taj_78:

(40, 46513), (45, 46528), (Start: 51 @46564 has 38 MA's),

Gene: Tapioca_60 Start: 39740, Stop: 39883, Start Num: 51

Candidate Starts for Tapioca_60:

(17, 39587), (Start: 51 @39740 has 38 MA's), (60, 39836),

Gene: Tessdabest_63 Start: 39357, Stop: 39500, Start Num: 51

Candidate Starts for Tessdabest_63:

(3, 39039), (5, 39048), (17, 39204), (Start: 51 @39357 has 38 MA's), (60, 39453),

Gene: ThulaThula_66 Start: 44182, Stop: 44340, Start Num: 37

Candidate Starts for ThulaThula_66:

(19, 44086), (Start: 37 @44182 has 3 MA's), (Start: 52 @44239 has 1 MA's), (58, 44287),

Gene: TootsiePop_82 Start: 51166, Stop: 51324, Start Num: 39

Candidate Starts for TootsiePop_82:

(10, 50950), (13, 51013), (20, 51070), (Start: 39 @51166 has 4 MA's), (42, 51175),

Gene: Toron_90 Start: 52849, Stop: 53001, Start Num: 37

Candidate Starts for Toron_90:

(Start: 37 @52849 has 3 MA's), (Start: 52 @52903 has 1 MA's), (58, 52951),

Gene: Tortellini_68 Start: 45349, Stop: 45510, Start Num: 38

Candidate Starts for Tortellini_68:

(Start: 38 @45349 has 4 MA's),

Gene: Tortoise12_62 Start: 38344, Stop: 38487, Start Num: 51

Candidate Starts for Tortoise12_62:

(3, 38026), (5, 38035), (17, 38191), (Start: 51 @38344 has 38 MA's), (60, 38440),

Gene: Whitty_45 Start: 34734, Stop: 34925, Start Num: 30

Candidate Starts for Whitty_45:

(Start: 30 @34734 has 13 MA's), (Start: 37 @34755 has 3 MA's), (41, 34770), (47, 34785),

Gene: Willsammy_61 Start: 41085, Stop: 41189, Start Num: 51

Candidate Starts for Willsammy_61:

(34, 41016), (44, 41046), (50, 41082), (Start: 51 @41085 has 38 MA's),

Gene: Xerxes_62 Start: 39220, Stop: 39363, Start Num: 51

Candidate Starts for Xerxes_62:

(3, 38902), (5, 38911), (17, 39067), (Start: 51 @39220 has 38 MA's), (60, 39316),

Gene: ZenTime222_45 Start: 34733, Stop: 34924, Start Num: 30

Candidate Starts for ZenTime222_45:

(Start: 30 @34733 has 13 MA's), (Start: 37 @34754 has 3 MA's), (41, 34769), (47, 34784),