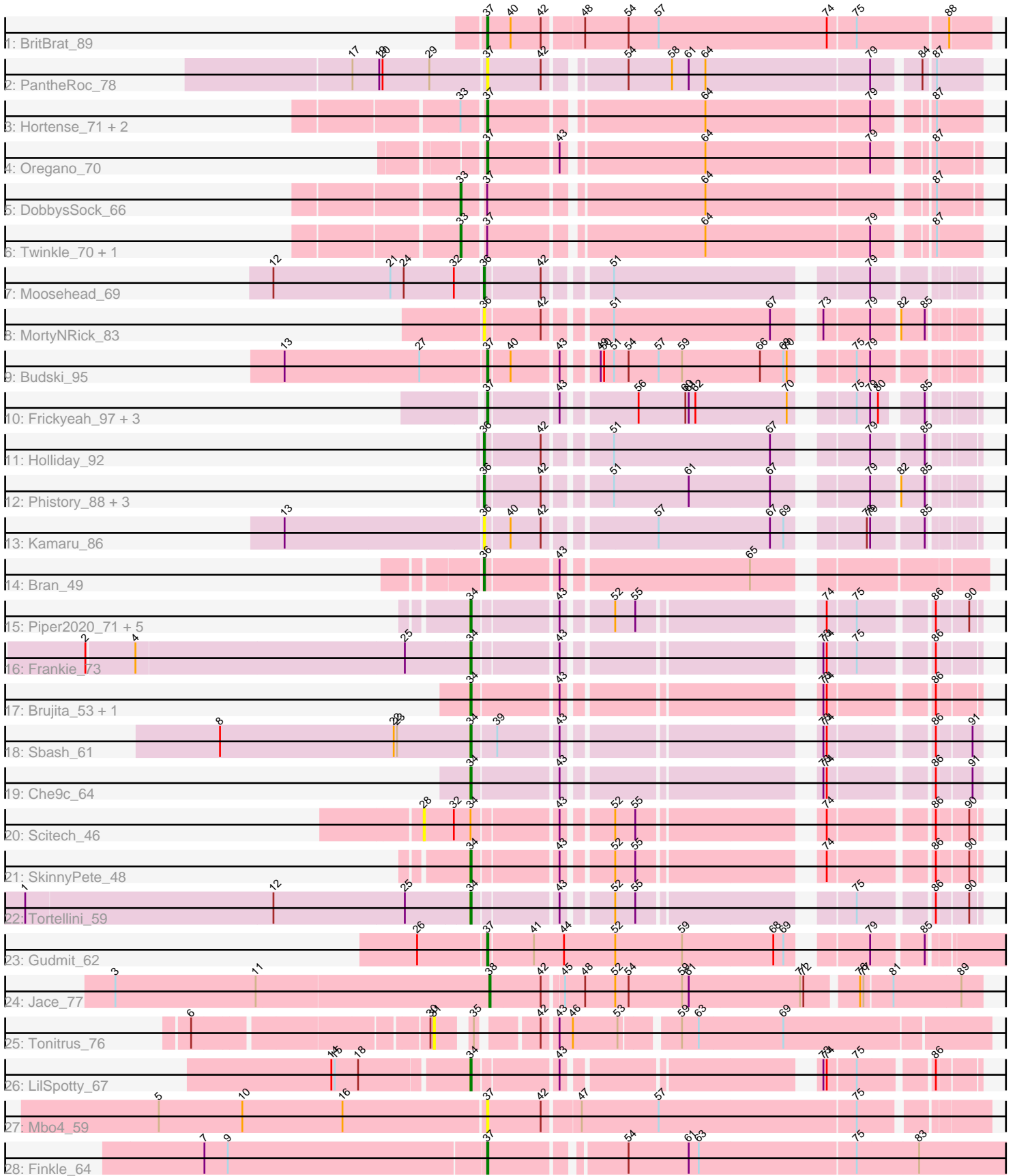


Pham 157990



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 157990 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157990 has 43 members, 9 are drafts.

Phages represented in each track:

- Track 1 : BritBrat_89
- Track 2 : PantheRoc_78
- Track 3 : Hortense_71, Howe_71, Adora_68
- Track 4 : Oregano_70
- Track 5 : DobbysSock_66
- Track 6 : Twinkle_70, Shlim410_69
- Track 7 : Moosehead_69
- Track 8 : MortyNRick_83
- Track 9 : Budski_95
- Track 10 : Frickyeah_97, Periwinkle_99, Horus_91, Leroy_90
- Track 11 : Holliday_92
- Track 12 : Phistory_88, Crater_90, Ecliptus_97, Apricot_90
- Track 13 : Kamaru_86
- Track 14 : Bran_49
- Track 15 : Piper2020_71, ChickenDinner_72, Awesomesauce_70, DocMcStuffins_69, Misha28_68, TootsiePop_68
- Track 16 : Frankie_73
- Track 17 : Brujita_53, Island3_53
- Track 18 : Sbash_61
- Track 19 : Che9c_64
- Track 20 : Scitech_46
- Track 21 : SkinnyPete_48
- Track 22 : Tortellini_59
- Track 23 : Gudmit_62
- Track 24 : Jace_77
- Track 25 : Tonitrus_76
- Track 26 : LilSpotty_67
- Track 27 : Mbo4_59
- Track 28 : Finkle_64

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

The start number called the most often in the published annotations is 34, it was called in 12 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Awesomesauce_70, Brujita_53, Che9c_64, ChickenDinner_72, DocMcStuffins_69, Frankie_73, Island3_53, LilSpotty_67, Misha28_68, Piper2020_71, Sbash_61, SkinnyPete_48, TootsiePop_68, Tortellini_59,

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

- Scitech_46,

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

- Adora_68, Apricot_90, Bran_49, BritBrat_89, Budski_95, Crater_90, DobbysSock_66, Ecliptus_97, Finkle_64, Frickyeah_97, Gudmit_62, Holliday_92, Hortense_71, Horus_91, Howe_71, Jace_77, Kamaru_86, Leroy_90, Mbo4_59, Moosehead_69, MortyNRick_83, Oregano_70, PantheRoc_78, Periwinkle_99, Phistory_88, Shlim410_69, Tonitrus_76, Twinkle_70,

Summary by start number:

Start 28:

- Found in 1 of 43 (2.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Scitech_46 (N),

Start 31:

- Found in 1 of 43 (2.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tonitrus_76 (singleton),

Start 33:

- Found in 6 of 43 (14.0%) of genes in pham
- Manual Annotations of this start: 3 of 34
- Called 50.0% of time when present
- Phage (with cluster) where this start called: DobbysSock_66 (CZ4), Shlim410_69 (CZ4), Twinkle_70 (CZ4),

Start 34:

- Found in 15 of 43 (34.9%) of genes in pham
- Manual Annotations of this start: 12 of 34
- Called 93.3% of time when present
- Phage (with cluster) where this start called: Awesomesauce_70 (F1), Brujita_53 (I1), Che9c_64 (I2), ChickenDinner_72 (F1), DocMcStuffins_69 (F1), Frankie_73 (F1), Island3_53 (I1), LilSpotty_67 (singleton), Misha28_68 (F1), Piper2020_71 (F1), Sbash_61 (I2), SkinnyPete_48 (N), TootsiePop_68 (F1), Tortellini_59 (P2),

Start 36:

- Found in 9 of 43 (20.9%) of genes in pham
- Manual Annotations of this start: 7 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot_90 (DN3), Bran_49 (EP), Crater_90 (DN3), Ecliptus_97 (DN), Holliday_92 (DN1), Kamaru_86 (DN1), Moosehead_69 (CZ6), MortyNRick_83 (DN), Phistory_88 (DN1),

Start 37:

- Found in 17 of 43 (39.5%) of genes in pham
- Manual Annotations of this start: 11 of 34
- Called 82.4% of time when present
- Phage (with cluster) where this start called: Adora_68 (CZ4), BritBrat_89 (CY2), Budski_95 (DN), Finkle_64 (singleton), Frickyeah_97 (DN1), Gudmit_62 (singleton), Hortense_71 (CZ4), Horus_91 (DN1), Howe_71 (CZ4), Leroy_90 (DN1), Mbo4_59 (singleton), Oregano_70 (CZ4), PantheRoc_78 (CZ3), Periwinkle_99 (DN1),

Start 38:

- Found in 1 of 43 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace_77 (singleton),

Summary by clusters:

There are 14 clusters represented in this pham: P2, DN, singleton, F1, I1, CZ3, I2, CZ6, CZ4, N, DN1, DN3, CY2, EP,

Info for manual annotations of cluster CY2:

- Start number 37 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ4:

- Start number 33 was manually annotated 3 times for cluster CZ4.
- Start number 37 was manually annotated 4 times for cluster CZ4.

Info for manual annotations of cluster CZ6:

- Start number 36 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DN:

- Start number 36 was manually annotated 1 time for cluster DN.
- Start number 37 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 36 was manually annotated 2 times for cluster DN1.
- Start number 37 was manually annotated 3 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 36 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster EP:

- Start number 36 was manually annotated 1 time for cluster EP.

Info for manual annotations of cluster F1:

- Start number 34 was manually annotated 5 times for cluster F1.

Info for manual annotations of cluster I1:

- Start number 34 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 34 was manually annotated 2 times for cluster I2.

Info for manual annotations of cluster N:

- Start number 34 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P2:

- Start number 34 was manually annotated 1 time for cluster P2.

Gene Information:

Gene: Adora_68 Start: 47407, Stop: 47808, Start Num: 37

Candidate Starts for Adora_68:

(Start: 33 @47389 has 3 MA's), (Start: 37 @47407 has 11 MA's), (64, 47584), (79, 47728), (87, 47770),

Gene: Apricot_90 Start: 48459, Stop: 48836, Start Num: 36

Candidate Starts for Apricot_90:

(Start: 36 @48459 has 7 MA's), (42, 48507), (51, 48555), (61, 48621), (67, 48693), (79, 48759), (82, 48780), (85, 48801),

Gene: Awesomesauce_70 Start: 42720, Stop: 43097, Start Num: 34

Candidate Starts for Awesomesauce_70:

(Start: 34 @42720 has 12 MA's), (43, 42789), (52, 42825), (55, 42843), (74, 42984), (75, 43008), (86, 43065), (90, 43089),

Gene: Bran_49 Start: 35390, Stop: 35785, Start Num: 36

Candidate Starts for Bran_49:

(Start: 36 @35390 has 7 MA's), (43, 35450), (65, 35606),

Gene: BritBrat_89 Start: 51800, Stop: 52234, Start Num: 37

Candidate Starts for BritBrat_89:

(Start: 37 @51800 has 11 MA's), (40, 51821), (42, 51848), (48, 51881), (54, 51920), (57, 51947), (74, 52097), (75, 52121), (88, 52199),

Gene: Brujita_53 Start: 36853, Stop: 37233, Start Num: 34

Candidate Starts for Brujita_53:

(Start: 34 @36853 has 12 MA's), (43, 36925), (73, 37117), (74, 37120), (86, 37201),

Gene: Budski_95 Start: 51613, Stop: 51987, Start Num: 37

Candidate Starts for Budski_95:

(13, 51436), (27, 51556), (Start: 37 @51613 has 11 MA's), (40, 51631), (43, 51670), (49, 51694), (50, 51697), (51, 51706), (54, 51718), (57, 51745), (59, 51766), (66, 51835), (69, 51856), (70, 51859), (75, 51898), (79, 51910),

Gene: Che9c_64 Start: 45395, Stop: 45778, Start Num: 34

Candidate Starts for Che9c_64:

(Start: 34 @45395 has 12 MA's), (43, 45467), (73, 45659), (74, 45662), (86, 45743), (91, 45770),

Gene: ChickenDinner_72 Start: 43637, Stop: 44014, Start Num: 34

Candidate Starts for ChickenDinner_72:

(Start: 34 @43637 has 12 MA's), (43, 43706), (52, 43742), (55, 43760), (74, 43901), (75, 43925), (86, 43982), (90, 44006),

Gene: Crater_90 Start: 48803, Stop: 49180, Start Num: 36

Candidate Starts for Crater_90:

(Start: 36 @48803 has 7 MA's), (42, 48851), (51, 48899), (61, 48965), (67, 49037), (79, 49103), (82, 49124), (85, 49145),

Gene: DobbysSock_66 Start: 44836, Stop: 45252, Start Num: 33

Candidate Starts for DobbysSock_66:

(Start: 33 @44836 has 3 MA's), (Start: 37 @44854 has 11 MA's), (64, 45031), (87, 45217),

Gene: DocMcStuffins_69 Start: 43637, Stop: 44014, Start Num: 34

Candidate Starts for DocMcStuffins_69:

(Start: 34 @43637 has 12 MA's), (43, 43706), (52, 43742), (55, 43760), (74, 43901), (75, 43925), (86, 43982), (90, 44006),

Gene: Ecliptus_97 Start: 52002, Stop: 52379, Start Num: 36

Candidate Starts for Ecliptus_97:

(Start: 36 @52002 has 7 MA's), (42, 52050), (51, 52098), (61, 52164), (67, 52236), (79, 52302), (82, 52323), (85, 52344),

Gene: Finkle_64 Start: 40296, Stop: 40754, Start Num: 37

Candidate Starts for Finkle_64:

(7, 40047), (9, 40068), (Start: 37 @40296 has 11 MA's), (54, 40404), (61, 40458), (63, 40467), (75, 40605), (83, 40659),

Gene: Frankie_73 Start: 45043, Stop: 45420, Start Num: 34

Candidate Starts for Frankie_73:

(2, 44707), (4, 44749), (25, 44986), (Start: 34 @45043 has 12 MA's), (43, 45112), (73, 45304), (74, 45307), (75, 45331), (86, 45388),

Gene: Frickyeah_97 Start: 50758, Stop: 51126, Start Num: 37

Candidate Starts for Frickyeah_97:

(Start: 37 @50758 has 11 MA's), (43, 50815), (56, 50872), (60, 50914), (61, 50917), (62, 50923), (70, 51004), (75, 51043), (79, 51055), (80, 51061), (85, 51091),

Gene: Gudmit_62 Start: 37386, Stop: 37871, Start Num: 37

Candidate Starts for Gudmit_62:

(26, 37326), (Start: 37 @37386 has 11 MA's), (41, 37425), (44, 37452), (52, 37497), (59, 37557), (68, 37638), (69, 37647), (79, 37701), (85, 37743),

Gene: Holliday_92 Start: 52368, Stop: 52745, Start Num: 36

Candidate Starts for Holliday_92:

(Start: 36 @52368 has 7 MA's), (42, 52416), (51, 52464), (67, 52602), (79, 52668), (85, 52710),

Gene: Hortense_71 Start: 48762, Stop: 49163, Start Num: 37

Candidate Starts for Hortense_71:

(Start: 33 @48744 has 3 MA's), (Start: 37 @48762 has 11 MA's), (64, 48939), (79, 49083), (87, 49125),

Gene: Horus_91 Start: 51033, Stop: 51401, Start Num: 37

Candidate Starts for Horus_91:

(Start: 37 @51033 has 11 MA's), (43, 51090), (56, 51147), (60, 51189), (61, 51192), (62, 51198), (70, 51279), (75, 51318), (79, 51330), (80, 51336), (85, 51366),

Gene: Howe_71 Start: 48762, Stop: 49163, Start Num: 37

Candidate Starts for Howe_71:

(Start: 33 @48744 has 3 MA's), (Start: 37 @48762 has 11 MA's), (64, 48939), (79, 49083), (87, 49125),

Gene: Island3_53 Start: 36853, Stop: 37233, Start Num: 34

Candidate Starts for Island3_53:

(Start: 34 @36853 has 12 MA's), (43, 36925), (73, 37117), (74, 37120), (86, 37201),

Gene: Jace_77 Start: 44043, Stop: 44462, Start Num: 38

Candidate Starts for Jace_77:

(3, 43710), (11, 43836), (Start: 38 @44043 has 1 MA's), (42, 44088), (45, 44103), (48, 44121), (52, 44148), (54, 44160), (59, 44208), (61, 44214), (71, 44313), (72, 44316), (76, 44358), (77, 44361), (81, 44385), (89, 44445),

Gene: Kamaru_86 Start: 48067, Stop: 48444, Start Num: 36

Candidate Starts for Kamaru_86:

(13, 47893), (Start: 36 @48067 has 7 MA's), (40, 48088), (42, 48115), (57, 48202), (67, 48301), (69, 48313), (78, 48364), (79, 48367), (85, 48409),

Gene: Leroy_90 Start: 49228, Stop: 49596, Start Num: 37

Candidate Starts for Leroy_90:

(Start: 37 @49228 has 11 MA's), (43, 49285), (56, 49342), (60, 49384), (61, 49387), (62, 49393), (70, 49474), (75, 49513), (79, 49525), (80, 49531), (85, 49561),

Gene: LilSpotty_67 Start: 41443, Stop: 41820, Start Num: 34

Candidate Starts for LilSpotty_67:

(14, 41326), (15, 41329), (18, 41350), (Start: 34 @41443 has 12 MA's), (43, 41512), (73, 41704), (74, 41707), (75, 41731), (86, 41788),

Gene: Mbo4_59 Start: 42474, Stop: 42896, Start Num: 37

Candidate Starts for Mbo4_59:

(5, 42183), (10, 42258), (16, 42348), (Start: 37 @42474 has 11 MA's), (42, 42522), (47, 42552), (57, 42621), (75, 42795),

Gene: Misha28_68 Start: 42725, Stop: 43102, Start Num: 34

Candidate Starts for Misha28_68:

(Start: 34 @42725 has 12 MA's), (43, 42794), (52, 42830), (55, 42848), (74, 42989), (75, 43013), (86, 43070), (90, 43094),

Gene: Moosehead_69 Start: 39233, Stop: 39610, Start Num: 36

Candidate Starts for Moosehead_69:

(12, 39047), (21, 39152), (24, 39164), (32, 39209), (Start: 36 @39233 has 7 MA's), (42, 39281), (51, 39329), (79, 39533),

Gene: MortyNRick_83 Start: 48781, Stop: 49158, Start Num: 36

Candidate Starts for MortyNRick_83:

(Start: 36 @48781 has 7 MA's), (42, 48829), (51, 48877), (67, 49015), (73, 49042), (79, 49081), (82, 49102), (85, 49123),

Gene: Oregano_70 Start: 43852, Stop: 44250, Start Num: 37
Candidate Starts for Oregano_70:
(Start: 37 @43852 has 11 MA's), (43, 43912), (64, 44029), (79, 44173), (87, 44215),

Gene: PantheRoc_78 Start: 49218, Stop: 49622, Start Num: 37
Candidate Starts for PantheRoc_78:
(17, 49101), (19, 49125), (20, 49128), (29, 49170), (Start: 37 @49218 has 11 MA's), (42, 49266), (54, 49326), (58, 49365), (61, 49380), (64, 49395), (79, 49539), (84, 49575), (87, 49584),

Gene: Periwinkle_99 Start: 52035, Stop: 52403, Start Num: 37
Candidate Starts for Periwinkle_99:
(Start: 37 @52035 has 11 MA's), (43, 52092), (56, 52149), (60, 52191), (61, 52194), (62, 52200), (70, 52281), (75, 52320), (79, 52332), (80, 52338), (85, 52368),

Gene: Phistory_88 Start: 48067, Stop: 48444, Start Num: 36
Candidate Starts for Phistory_88:
(Start: 36 @48067 has 7 MA's), (42, 48115), (51, 48163), (61, 48229), (67, 48301), (79, 48367), (82, 48388), (85, 48409),

Gene: Piper2020_71 Start: 43620, Stop: 43997, Start Num: 34
Candidate Starts for Piper2020_71:
(Start: 34 @43620 has 12 MA's), (43, 43689), (52, 43725), (55, 43743), (74, 43884), (75, 43908), (86, 43965), (90, 43989),

Gene: Sbash_61 Start: 42805, Stop: 43188, Start Num: 34
Candidate Starts for Sbash_61:
(8, 42580), (22, 42736), (23, 42739), (Start: 34 @42805 has 12 MA's), (39, 42826), (43, 42877), (73, 43069), (74, 43072), (86, 43153), (91, 43180),

Gene: Scitech_46 Start: 32555, Stop: 32974, Start Num: 28
Candidate Starts for Scitech_46:
(28, 32555), (32, 32582), (Start: 34 @32597 has 12 MA's), (43, 32666), (52, 32702), (55, 32720), (74, 32861), (86, 32942), (90, 32966),

Gene: Shlim410_69 Start: 48744, Stop: 49163, Start Num: 33
Candidate Starts for Shlim410_69:
(Start: 33 @48744 has 3 MA's), (Start: 37 @48762 has 11 MA's), (64, 48939), (79, 49083), (87, 49125),

Gene: SkinnyPete_48 Start: 33096, Stop: 33473, Start Num: 34
Candidate Starts for SkinnyPete_48:
(Start: 34 @33096 has 12 MA's), (43, 33165), (52, 33201), (55, 33219), (74, 33360), (86, 33441), (90, 33465),

Gene: Tonitrus_76 Start: 53537, Stop: 53983, Start Num: 31
Candidate Starts for Tonitrus_76:
(6, 53345), (30, 53534), (31, 53537), (35, 53561), (42, 53606), (43, 53618), (46, 53630), (53, 53669), (59, 53714), (63, 53729), (69, 53804),

Gene: TootsiePop_68 Start: 42725, Stop: 43102, Start Num: 34
Candidate Starts for TootsiePop_68:
(Start: 34 @42725 has 12 MA's), (43, 42794), (52, 42830), (55, 42848), (74, 42989), (75, 43013), (86, 43070), (90, 43094),

Gene: Tortellini_59 Start: 41926, Stop: 42303, Start Num: 34

Candidate Starts for Tortellini_59:

(1, 41533), (12, 41752), (25, 41869), (Start: 34 @41926 has 12 MA's), (43, 41995), (52, 42031), (55, 42049), (75, 42214), (86, 42271), (90, 42295),

Gene: Twinkle_70 Start: 49803, Stop: 50222, Start Num: 33

Candidate Starts for Twinkle_70:

(Start: 33 @49803 has 3 MA's), (Start: 37 @49821 has 11 MA's), (64, 49998), (79, 50142), (87, 50184),