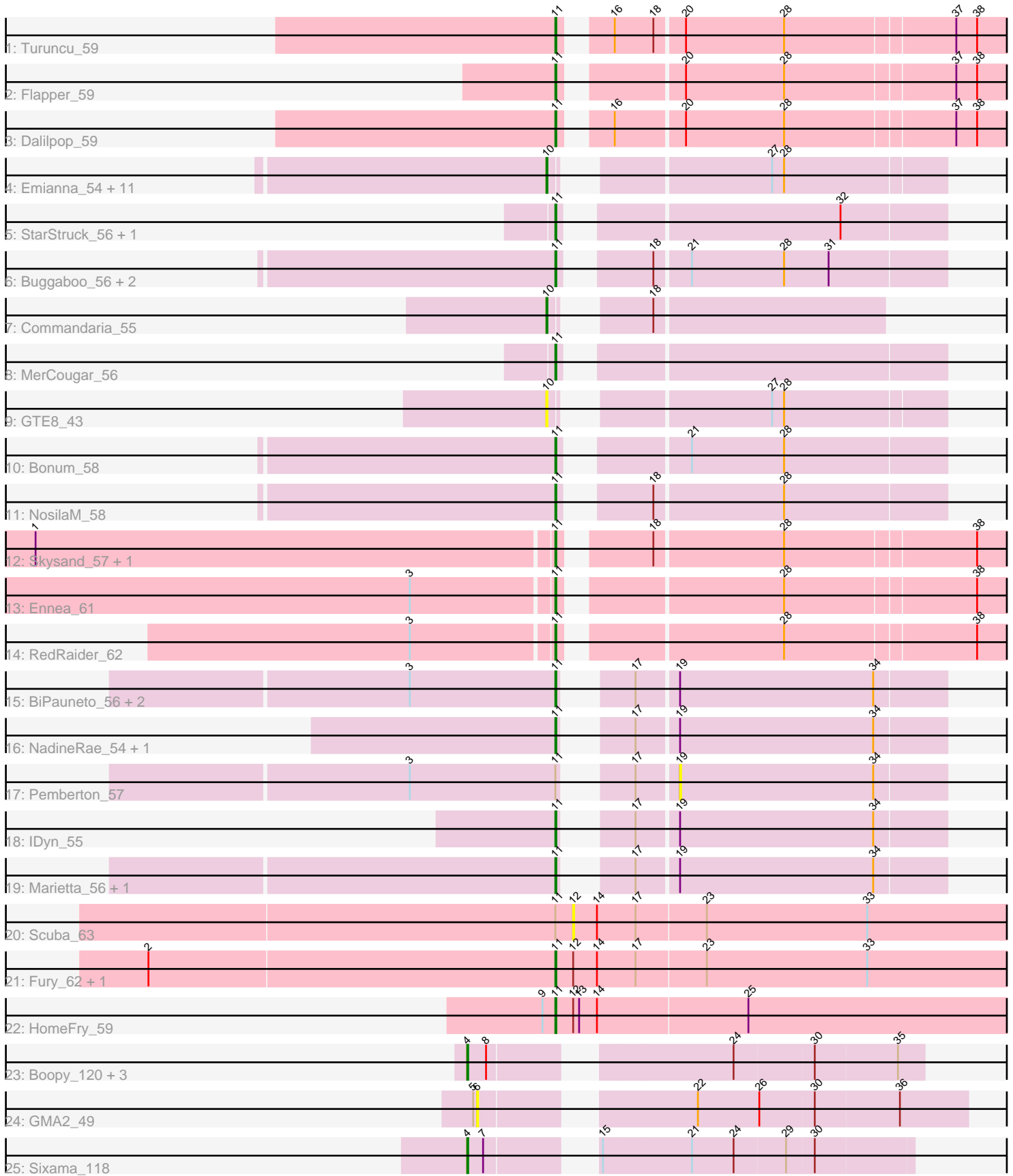


Pham 308781



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 308781 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308781 has 48 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Turuncu_59
- Track 2 : Flapper_59
- Track 3 : Dalilpop_59
- Track 4 : Emianna_54, Kurt_54, NatB6_54, KidneyBean_54, GrootJr_56, Wheezy_54, NovumRegina_54, Jifall16_53, Tracker_54, Arti_54, Foxboro_55, Phomeo_53
- Track 5 : StarStruck_56, Outis_56
- Track 6 : Buggaboo_56, Kabluna_58, SuperSulley_56
- Track 7 : Commandaria_55
- Track 8 : MerCougar_56
- Track 9 : GTE8_43
- Track 10 : Bonum_58
- Track 11 : NosilaM_58
- Track 12 : Skysand_57, Patio_58
- Track 13 : Ennea_61
- Track 14 : RedRaider_62
- Track 15 : BiPauneto_56, Sukkupi_55, Yndexa_55
- Track 16 : NadineRae_54, HubbaBubba_51
- Track 17 : Pemberton_57
- Track 18 : IDyn_55
- Track 19 : Marietta_56, WhoseManz_55
- Track 20 : Scuba_63
- Track 21 : Fury_62, Pleakley_62
- Track 22 : HomeFry_59
- Track 23 : Boopy_120, Forza_120, BlueNGold_119, Mareelih_118
- Track 24 : GMA2_49
- Track 25 : Sixama_118

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

The start number called the most often in the published annotations is 11, it was called in 26 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BiPauneto_56, Bonum_58, Buggaboo_56, Dalilpop_59, Ennea_61, Flapper_59, Fury_62, HomeFry_59, HubbaBubba_51, IDyn_55, Kabluna_58, Marietta_56, MerCougar_56, NadineRae_54, NosilaM_58, Outis_56, Patio_58, Pleakley_62, RedRaider_62, Skysand_57, StarStruck_56, Sukkupi_55, SuperSulley_56, Turuncu_59, WhoseManz_55, Yndexa_55,

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

- Pemberton_57, Scuba_63,

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

- Arti_54, BlueNGold_119, Boopy_120, Commandaria_55, Emianna_54, Forza_120, Foxboro_55, GMA2_49, GTE8_43, GrootJr_56, Jifall16_53, KidneyBean_54, Kurt_54, Mareelih_118, NatB6_54, NovumRegina_54, Phomeo_53, Sixama_118, Tracker_54, Wheezy_54,

Summary by start number:

Start 4:

- Found in 5 of 48 (10.4%) of genes in pham
- Manual Annotations of this start: 5 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_119 (DS), Boopy_120 (DS), Forza_120 (DS), Mareelih_118 (DS), Sixama_118 (DS),

Start 6:

- Found in 1 of 48 (2.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA2_49 (DS),

Start 10:

- Found in 14 of 48 (29.2%) of genes in pham
- Manual Annotations of this start: 13 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arti_54 (CR2), Commandaria_55 (CR2), Emianna_54 (CR2), Foxboro_55 (CR2), GTE8_43 (CR2), GrootJr_56 (CR2), Jifall16_53 (CR2), KidneyBean_54 (CR2), Kurt_54 (CR2), NatB6_54 (CR2), NovumRegina_54 (CR2), Phomeo_53 (CR2), Tracker_54 (CR2), Wheezy_54 (CR2),

Start 11:

- Found in 28 of 48 (58.3%) of genes in pham
- Manual Annotations of this start: 26 of 44
- Called 92.9% of time when present
- Phage (with cluster) where this start called: BiPauneto_56 (CR4), Bonum_58 (CR2), Buggaboo_56 (CR2), Dalilpop_59 (CR1), Ennea_61 (CR3), Flapper_59 (CR1), Fury_62 (CR5), HomeFry_59 (CR5), HubbaBubba_51 (CR4), IDyn_55 (CR4), Kabluna_58 (CR2), Marietta_56 (CR4), MerCougar_56 (CR2), NadineRae_54 (CR4), NosilaM_58 (CR2), Outis_56 (CR2), Patio_58 (CR3), Pleakley_62 (CR5), RedRaider_62 (CR3), Skysand_57 (CR3), StarStruck_56 (CR2), Sukkupi_55 (CR4), SuperSulley_56 (CR2), Turuncu_59 (CR1), WhoseManz_55 (CR4), Yndexa_55 (CR4),

Start 12:

- Found in 4 of 48 (8.3%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Scuba_63 (CR5),

Start 19:

- Found in 9 of 48 (18.8%) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Pemberton_57 (CR4),

Summary by clusters:

There are 6 clusters represented in this pham: CR2, CR3, CR1, CR4, CR5, DS,

Info for manual annotations of cluster CR1:

- Start number 11 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 10 was manually annotated 13 times for cluster CR2.
- Start number 11 was manually annotated 8 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 11 was manually annotated 4 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 11 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 11 was manually annotated 3 times for cluster CR5.

Info for manual annotations of cluster DS:

- Start number 4 was manually annotated 5 times for cluster DS.

Gene Information:

Gene: Arti_54 Start: 42850, Stop: 42503, Start Num: 10

Candidate Starts for Arti_54:

(Start: 10 @42850 has 13 MA's), (27, 42673), (28, 42661),

Gene: BiPauneto_56 Start: 42359, Stop: 42015, Start Num: 11

Candidate Starts for BiPauneto_56:

(3, 42506), (Start: 11 @42359 has 26 MA's), (17, 42320), (19, 42281), (34, 42086),

Gene: BlueNGold_119 Start: 76651, Stop: 76244, Start Num: 4

Candidate Starts for BlueNGold_119:

(Start: 4 @76651 has 5 MA's), (8, 76633), (24, 76429), (30, 76351), (35, 76270),

Gene: Bonum_58 Start: 43499, Stop: 43149, Start Num: 11

Candidate Starts for Bonum_58:

(Start: 11 @43499 has 26 MA's), (21, 43403), (28, 43310),

Gene: Boopy_120 Start: 76663, Stop: 76256, Start Num: 4
Candidate Starts for Boopy_120:
(Start: 4 @76663 has 5 MA's), (8, 76645), (24, 76441), (30, 76363), (35, 76282),

Gene: Buggaboo_56 Start: 43978, Stop: 43628, Start Num: 11
Candidate Starts for Buggaboo_56:
(Start: 11 @43978 has 26 MA's), (18, 43915), (21, 43882), (28, 43789), (31, 43744),

Gene: Commandaria_55 Start: 43971, Stop: 43681, Start Num: 10
Candidate Starts for Commandaria_55:
(Start: 10 @43971 has 13 MA's), (18, 43908),

Gene: Dalilpop_59 Start: 45148, Stop: 44726, Start Num: 11
Candidate Starts for Dalilpop_59:
(Start: 11 @45148 has 26 MA's), (16, 45115), (20, 45049), (28, 44950), (37, 44785), (38, 44764),

Gene: Emianna_54 Start: 43842, Stop: 43495, Start Num: 10
Candidate Starts for Emianna_54:
(Start: 10 @43842 has 13 MA's), (27, 43665), (28, 43653),

Gene: Ennea_61 Start: 44864, Stop: 44445, Start Num: 11
Candidate Starts for Ennea_61:
(3, 45002), (Start: 11 @44864 has 26 MA's), (28, 44666), (38, 44480),

Gene: Flapper_59 Start: 44580, Stop: 44158, Start Num: 11
Candidate Starts for Flapper_59:
(Start: 11 @44580 has 26 MA's), (20, 44481), (28, 44382), (37, 44217), (38, 44196),

Gene: Forza_120 Start: 76579, Stop: 76172, Start Num: 4
Candidate Starts for Forza_120:
(Start: 4 @76579 has 5 MA's), (8, 76561), (24, 76357), (30, 76279), (35, 76198),

Gene: Foxboro_55 Start: 44348, Stop: 44001, Start Num: 10
Candidate Starts for Foxboro_55:
(Start: 10 @44348 has 13 MA's), (27, 44171), (28, 44159),

Gene: Fury_62 Start: 43029, Stop: 42574, Start Num: 11
Candidate Starts for Fury_62:
(2, 43437), (Start: 11 @43029 has 26 MA's), (12, 43011), (14, 42987), (17, 42948), (23, 42879), (33, 42717),

Gene: GMA2_49 Start: 51057, Stop: 50611, Start Num: 6
Candidate Starts for GMA2_49:
(5, 51060), (6, 51057), (22, 50877), (26, 50817), (30, 50763), (36, 50679),

Gene: GTE8_43 Start: 37105, Stop: 36758, Start Num: 10
Candidate Starts for GTE8_43:
(Start: 10 @37105 has 13 MA's), (27, 36928), (28, 36916),

Gene: GrootJr_56 Start: 43224, Stop: 42877, Start Num: 10
Candidate Starts for GrootJr_56:
(Start: 10 @43224 has 13 MA's), (27, 43047), (28, 43035),

Gene: HomeFry_59 Start: 41729, Stop: 41274, Start Num: 11
Candidate Starts for HomeFry_59:
(9, 41741), (Start: 11 @41729 has 26 MA's), (12, 41711), (13, 41705), (14, 41687), (25, 41537),

Gene: HubbaBubba_51 Start: 39368, Stop: 39024, Start Num: 11
Candidate Starts for HubbaBubba_51:
(Start: 11 @39368 has 26 MA's), (17, 39329), (19, 39290), (34, 39095),

Gene: IDyn_55 Start: 40800, Stop: 40456, Start Num: 11
Candidate Starts for IDyn_55:
(Start: 11 @40800 has 26 MA's), (17, 40761), (19, 40722), (34, 40527),

Gene: Jifall16_53 Start: 43496, Stop: 43149, Start Num: 10
Candidate Starts for Jifall16_53:
(Start: 10 @43496 has 13 MA's), (27, 43319), (28, 43307),

Gene: Kabluna_58 Start: 42914, Stop: 42564, Start Num: 11
Candidate Starts for Kabluna_58:
(Start: 11 @42914 has 26 MA's), (18, 42851), (21, 42818), (28, 42725), (31, 42680),

Gene: KidneyBean_54 Start: 43620, Stop: 43273, Start Num: 10
Candidate Starts for KidneyBean_54:
(Start: 10 @43620 has 13 MA's), (27, 43443), (28, 43431),

Gene: Kurt_54 Start: 43857, Stop: 43510, Start Num: 10
Candidate Starts for Kurt_54:
(Start: 10 @43857 has 13 MA's), (27, 43680), (28, 43668),

Gene: Mareelih_118 Start: 76081, Stop: 75674, Start Num: 4
Candidate Starts for Mareelih_118:
(Start: 4 @76081 has 5 MA's), (8, 76063), (24, 75859), (30, 75781), (35, 75700),

Gene: Marietta_56 Start: 40694, Stop: 40350, Start Num: 11
Candidate Starts for Marietta_56:
(Start: 11 @40694 has 26 MA's), (17, 40655), (19, 40616), (34, 40421),

Gene: MerCougar_56 Start: 44115, Stop: 43765, Start Num: 11
Candidate Starts for MerCougar_56:
(Start: 11 @44115 has 26 MA's),

Gene: NadineRae_54 Start: 39938, Stop: 39594, Start Num: 11
Candidate Starts for NadineRae_54:
(Start: 11 @39938 has 26 MA's), (17, 39899), (19, 39860), (34, 39665),

Gene: NatB6_54 Start: 42914, Stop: 42567, Start Num: 10
Candidate Starts for NatB6_54:
(Start: 10 @42914 has 13 MA's), (27, 42737), (28, 42725),

Gene: NosilaM_58 Start: 43812, Stop: 43462, Start Num: 11
Candidate Starts for NosilaM_58:
(Start: 11 @43812 has 26 MA's), (18, 43749), (28, 43623),

Gene: NovumRegina_54 Start: 43223, Stop: 42876, Start Num: 10
Candidate Starts for NovumRegina_54:
(Start: 10 @43223 has 13 MA's), (27, 43046), (28, 43034),

Gene: Outis_56 Start: 43809, Stop: 43459, Start Num: 11
Candidate Starts for Outis_56:
(Start: 11 @43809 has 26 MA's), (32, 43563),

Gene: Patio_58 Start: 44088, Stop: 43669, Start Num: 11
Candidate Starts for Patio_58:
(1, 44604), (Start: 11 @44088 has 26 MA's), (18, 44016), (28, 43890), (38, 43704),

Gene: Pemberton_57 Start: 40598, Stop: 40332, Start Num: 19
Candidate Starts for Pemberton_57:
(3, 40823), (Start: 11 @40676 has 26 MA's), (17, 40637), (19, 40598), (34, 40403),

Gene: Phomeo_53 Start: 43492, Stop: 43145, Start Num: 10
Candidate Starts for Phomeo_53:
(Start: 10 @43492 has 13 MA's), (27, 43315), (28, 43303),

Gene: Pleakley_62 Start: 43030, Stop: 42575, Start Num: 11
Candidate Starts for Pleakley_62:
(2, 43438), (Start: 11 @43030 has 26 MA's), (12, 43012), (14, 42988), (17, 42949), (23, 42880), (33, 42718),

Gene: RedRaider_62 Start: 46110, Stop: 45691, Start Num: 11
Candidate Starts for RedRaider_62:
(3, 46248), (Start: 11 @46110 has 26 MA's), (28, 45912), (38, 45726),

Gene: Scuba_63 Start: 43086, Stop: 42649, Start Num: 12
Candidate Starts for Scuba_63:
(Start: 11 @43104 has 26 MA's), (12, 43086), (14, 43062), (17, 43023), (23, 42954), (33, 42792),

Gene: Sixama_118 Start: 76049, Stop: 75654, Start Num: 4
Candidate Starts for Sixama_118:
(Start: 4 @76049 has 5 MA's), (7, 76034), (15, 75956), (21, 75869), (24, 75827), (29, 75776), (30, 75749),

Gene: Skysand_57 Start: 44308, Stop: 43889, Start Num: 11
Candidate Starts for Skysand_57:
(1, 44824), (Start: 11 @44308 has 26 MA's), (18, 44236), (28, 44110), (38, 43924),

Gene: StarStruck_56 Start: 43809, Stop: 43459, Start Num: 11
Candidate Starts for StarStruck_56:
(Start: 11 @43809 has 26 MA's), (32, 43563),

Gene: Sukkupi_55 Start: 42250, Stop: 41906, Start Num: 11
Candidate Starts for Sukkupi_55:
(3, 42397), (Start: 11 @42250 has 26 MA's), (17, 42211), (19, 42172), (34, 41977),

Gene: SuperSulley_56 Start: 43978, Stop: 43628, Start Num: 11
Candidate Starts for SuperSulley_56:
(Start: 11 @43978 has 26 MA's), (18, 43915), (21, 43882), (28, 43789), (31, 43744),

Gene: Tracker_54 Start: 42638, Stop: 42291, Start Num: 10
Candidate Starts for Tracker_54:
(Start: 10 @42638 has 13 MA's), (27, 42461), (28, 42449),

Gene: Turuncu_59 Start: 44242, Stop: 43820, Start Num: 11
Candidate Starts for Turuncu_59:
(Start: 11 @44242 has 26 MA's), (16, 44209), (18, 44170), (20, 44143), (28, 44044), (37, 43879), (38, 43858),

Gene: Wheezy_54 Start: 42846, Stop: 42499, Start Num: 10
Candidate Starts for Wheezy_54:
(Start: 10 @42846 has 13 MA's), (27, 42669), (28, 42657),

Gene: WhoseManz_55 Start: 40307, Stop: 39963, Start Num: 11
Candidate Starts for WhoseManz_55:
(Start: 11 @40307 has 26 MA's), (17, 40268), (19, 40229), (34, 40034),

Gene: Yndexa_55 Start: 42250, Stop: 41906, Start Num: 11
Candidate Starts for Yndexa_55:
(3, 42397), (Start: 11 @42250 has 26 MA's), (17, 42211), (19, 42172), (34, 41977),