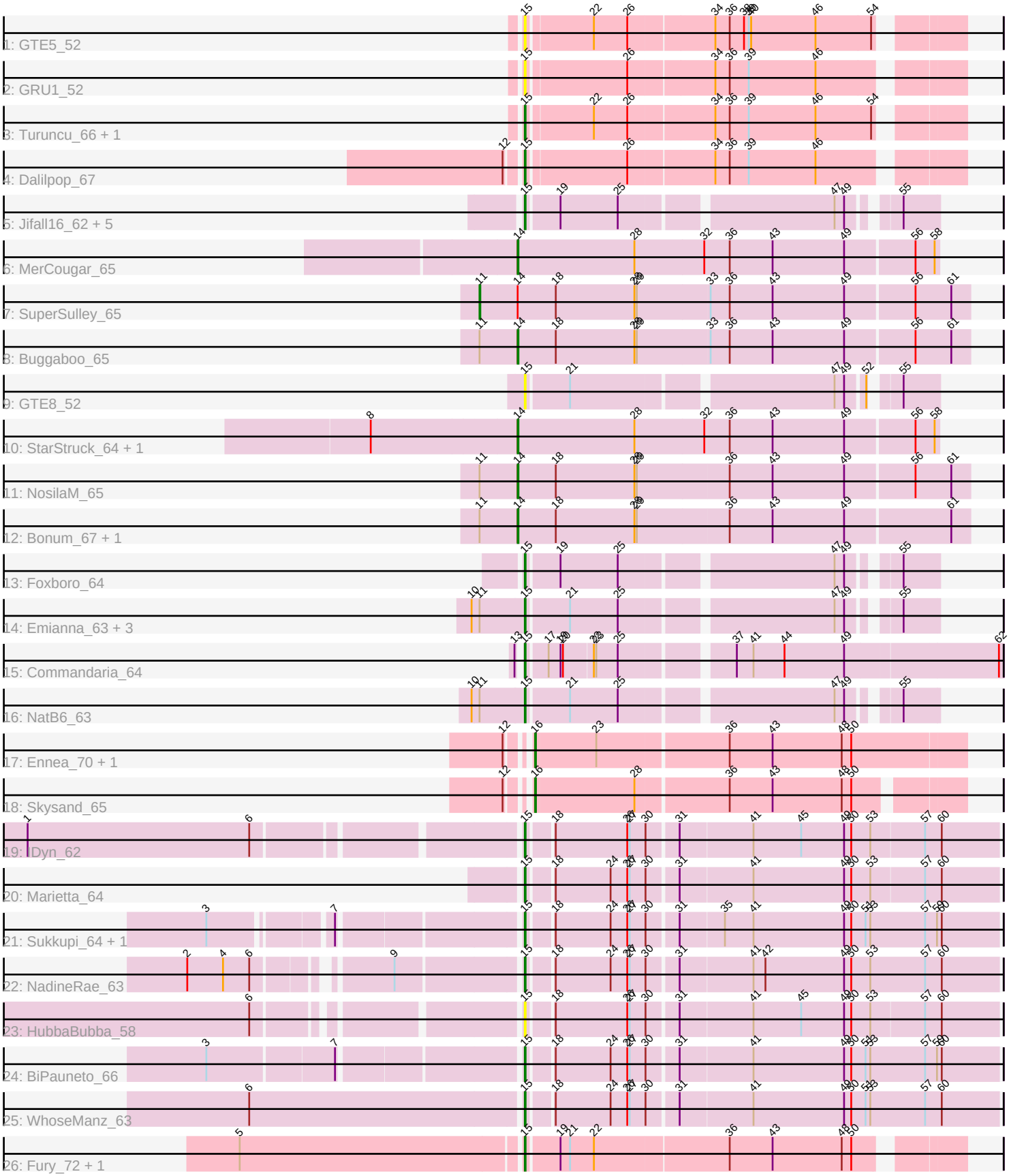
Pham 194156


1: GTE5_52
2: GRU1_52
3: Turuncu_66 + 1
4: Dalilpop_67
5: Jifall16_62 + 5
6: MerCougar_65
7: SuperSulley_65
8: Buggaboo_65
9: GTE8_52
10: StarStruck_64 + 1
11: NosilaM_65
12: Bonum_67 + 1
13: Foxboro_64
14: Emianna_63 + 3
15: Commandaria_64
16: NatB6_63
17: Ennea_70 + 1
18: Skysand_65
19: IDyn_62
20: Marietta_64
21: Sukkupi_64 + 1
22: NadineRae_63
23: HubbaBubba_58
24: BiPauneto_66
25: WhoseManz_63
26: Fury_72 + 1

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 194156 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194156 has 40 members, 5 are drafts.

Phages represented in each track:
- Track 1 : GTE5_52
- Track 2 : GRU1_52
- Track 3 : Turuncu_66, Flapper_66
- Track 4 : Dalilpop_67
- Track 5 : Jifall16_62, Tracker_63, Arti_62, Phomeo_62, KidneyBean_63, Wheezy_63
- Track 6 : MerCougar_65
- Track 7 : SuperSulley_65
- Track 8 : Buggaboo_65
- Track 9 : GTE8_52
- Track 10 : StarStruck_64, Outis_64
- Track 11 : NosilaM_65
- Track 12 : Bonum_67, Kabluna_66
- Track 13 : Foxboro_64
- Track 14 : Emianna_63, Kurt_63, NovumRegina_63, GrootJr_65
- Track 15 : Commandaria_64
- Track 16 : NatB6_63
- Track 17 : Ennea_70, Patio_65
- Track 18 : Skysand_65
- Track 19 : IDyn_62
- Track 20 : Marietta_64
- Track 21 : Sukkupi_64, Yndexa_64
- Track 22 : NadineRae_63
- Track 23 : HubbaBubba_58
- Track 24 : BiPauneto_66
- Track 25 : WhoseManz_63
- Track 26 : Fury_72, Pleakley_72

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

The start number called the most often in the published annotations is 15, it was called in 24 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Arti_62, BiPauneto_66, Commandaria_64, Dalilpop_67, Emianna_63, Flapper_66, Foxboro_64, Fury_72, GRU1_52, GTE5_52, GTE8_52, GrootJr_65, HubbaBubba_58, IDyn_62, Jifall16_62, KidneyBean_63, Kurt_63, Marietta_64, NadineRae_63, NatB6_63, NovumRegina_63, Phomeo_62, Pleakley_72, Sukkupi_64, Tracker_63, Turuncu_66, Wheezy_63, WhoseManz_63, Yndexa_64,

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

Genes that do not have the "Most Annotated" start:
• Bonum_67, Buggaboo_65, Ennea_70, Kabluna_66, MerCougar_65, NosilaM_65, Outis_64, Patio_65, Skysand_65, StarStruck_64, SuperSulley_65,

Summary by start number:

Start 11:
• Found in 10 of 40 (25.0%) of genes in pham
• Manual Annotations of this start: 1 of 35
• Called 10.0% of time when present
• Phage (with cluster) where this start called: SuperSulley_65 (CR2),

Start 14:
• Found in 8 of 40 (20.0%) of genes in pham
• Manual Annotations of this start: 7 of 35
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Bonum_67 (CR2), Buggaboo_65 (CR2), Kabluna_66 (CR2), MerCougar_65 (CR2), NosilaM_65 (CR2), Outis_64 (CR2), StarStruck_64 (CR2),

Start 15:
• Found in 29 of 40 (72.5%) of genes in pham
• Manual Annotations of this start: 24 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arti_62 (CR2), BiPauneto_66 (CR4), Commandaria_64 (CR2), Dalilpop_67 (CR1), Emianna_63 (CR2), Flapper_66 (CR1), Foxboro_64 (CR2), Fury_72 (CR5), GRU1_52 (CR1), GTE5_52 (CR1), GTE8_52 (CR2), GrootJr_65 (CR2), HubbaBubba_58 (CR4), IDyn_62 (CR4), Jifall16_62 (CR2), KidneyBean_63 (CR2), Kurt_63 (CR2), Marietta_64 (CR4), NadineRae_63 (CR4), NatB6_63 (CR2), NovumRegina_63 (CR2), Phomeo_62 (CR2), Pleakley_72 (CR5), Sukkupi_64 (CR4), Tracker_63 (CR2), Turuncu_66 (CR1), Wheezy_63 (CR2), WhoseManz_63 (CR4), Yndexa_64 (CR4),

Start 16:
• Found in 3 of 40 (7.5%) of genes in pham
• Manual Annotations of this start: 3 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ennea_70 (CR3), Patio_65 (CR3), Skysand_65 (CR3),

Summary by clusters:

There are 5 clusters represented in this pham: CR2, CR3, CR1, CR4, CR5,

Info for manual annotations of cluster CR1:
•Start number 15 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 11 was manually annotated 1 time for cluster CR2.
•Start number 14 was manually annotated 7 times for cluster CR2.
•Start number 15 was manually annotated 12 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 16 was manually annotated 3 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 15 was manually annotated 7 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 15 was manually annotated 2 times for cluster CR5.

Gene Information:

Gene: Arti_62 Start: 48954, Stop: 48490, Start Num: 15
Candidate Starts for Arti_62:
(Start: 15 @48954 has 24 MA's), (19, 48915), (25, 48843), (47, 48594), (49, 48582), (55, 48534),

Gene: BiPauneto_66 Start: 48649, Stop: 48077, Start Num: 15
Candidate Starts for BiPauneto_66:
(3, 49012), (7, 48859), (Start: 15 @48649 has 24 MA's), (18, 48622), (24, 48553), (26, 48532), (27, 48529), (30, 48511), (31, 48475), (41, 48385), (49, 48271), (50, 48262), (51, 48244), (53, 48238), (57, 48169), (59, 48154), (60, 48148),

Gene: Bonum_67 Start: 49827, Stop: 49267, Start Num: 14
Candidate Starts for Bonum_67:
(Start: 11 @49875 has 1 MA's), (Start: 14 @49827 has 7 MA's), (18, 49779), (28, 49680), (29, 49677), (36, 49563), (43, 49509), (49, 49419), (61, 49290),

Gene: Buggaboo_65 Start: 50384, Stop: 49824, Start Num: 14
Candidate Starts for Buggaboo_65:
(Start: 11 @50432 has 1 MA's), (Start: 14 @50384 has 7 MA's), (18, 50336), (28, 50237), (29, 50234), (33, 50144), (36, 50120), (43, 50066), (49, 49976), (56, 49892), (61, 49847),

Gene: Commandaria_64 Start: 50263, Stop: 49703, Start Num: 15
Candidate Starts for Commandaria_64:
(13, 50266), (Start: 15 @50263 has 24 MA's), (17, 50239), (19, 50224), (20, 50221), (22, 50185), (23, 50182), (25, 50155), (37, 50029), (41, 50008), (44, 49969), (49, 49894), (62, 49708),

Gene: Dalilpop_67 Start: 51193, Stop: 50687, Start Num: 15
Candidate Starts for Dalilpop_67:
(12, 51208), (Start: 15 @51193 has 24 MA's), (26, 51073), (34, 50971), (36, 50953), (39, 50929), (46, 50845),

Gene: Emianna_63 Start: 50197, Stop: 49733, Start Num: 15
Candidate Starts for Emianna_63:

(10, 50251), (Start: 11 @50242 has 1 MA's), (Start: 15 @50197 has 24 MA's), (21, 50146), (25, 50086), (47, 49837), (49, 49825), (55, 49777),

Gene: Ennea_70 Start: 51245, Stop: 50718, Start Num: 16
Candidate Starts for Ennea_70:
(12, 51263), (Start: 16 @51245 has 3 MA's), (23, 51170), (36, 51011), (43, 50957), (48, 50870), (50, 50858),

Gene: Flapper_66 Start: 50383, Stop: 49877, Start Num: 15
Candidate Starts for Flapper_66:
(Start: 15 @50383 has 24 MA's), (22, 50305), (26, 50263), (34, 50161), (36, 50143), (39, 50119), (46, 50035), (54, 49966),

Gene: Foxboro_64 Start: 50706, Stop: 50242, Start Num: 15
Candidate Starts for Foxboro_64:
(Start: 15 @50706 has 24 MA's), (19, 50667), (25, 50595), (47, 50346), (49, 50334), (55, 50286),

Gene: Fury_72 Start: 49499, Stop: 48987, Start Num: 15
Candidate Starts for Fury_72:
(5, 49844), (Start: 15 @49499 has 24 MA's), (19, 49460), (21, 49448), (22, 49418), (36, 49253), (43, 49199), (48, 49112), (50, 49100),

Gene: GRU1_52 Start: 42234, Stop: 41728, Start Num: 15
Candidate Starts for GRU1_52:
(Start: 15 @42234 has 24 MA's), (26, 42114), (34, 42012), (36, 41994), (39, 41970), (46, 41886),

Gene: GTE5_52 Start: 43260, Stop: 42754, Start Num: 15
Candidate Starts for GTE5_52:
(Start: 15 @43260 has 24 MA's), (22, 43182), (26, 43140), (34, 43038), (36, 43020), (38, 43002), (39, 42996), (40, 42993), (46, 42912), (54, 42843),

Gene: GTE8_52 Start: 43411, Stop: 42947, Start Num: 15
Candidate Starts for GTE8_52:
(Start: 15 @43411 has 24 MA's), (21, 43360), (47, 43051), (49, 43039), (52, 43018), (55, 42991),

Gene: GrootJr_65 Start: 49579, Stop: 49115, Start Num: 15
Candidate Starts for GrootJr_65:
(10, 49633), (Start: 11 @49624 has 1 MA's), (Start: 15 @49579 has 24 MA's), (21, 49528), (25, 49468), (47, 49219), (49, 49207), (55, 49159),

Gene: HubbaBubba_58 Start: 45153, Stop: 44584, Start Num: 15
Candidate Starts for HubbaBubba_58:
(6, 45444), (Start: 15 @45153 has 24 MA's), (18, 45126), (26, 45036), (27, 45033), (30, 45015), (31, 44979), (41, 44889), (45, 44829), (49, 44775), (50, 44766), (53, 44742), (57, 44676), (60, 44655),

Gene: IDyn_62 Start: 46576, Stop: 46007, Start Num: 15
Candidate Starts for IDyn_62:
(1, 47158), (6, 46879), (Start: 15 @46576 has 24 MA's), (18, 46549), (26, 46459), (27, 46456), (30, 46438), (31, 46402), (41, 46312), (45, 46252), (49, 46198), (50, 46189), (53, 46165), (57, 46099), (60, 46078),

Gene: Jifall16_62 Start: 49851, Stop: 49387, Start Num: 15
Candidate Starts for Jifall16_62:

(Start: 15 @49851 has 24 MA's), (19, 49812), (25, 49740), (47, 49491), (49, 49479), (55, 49431),

Gene: Kabluna_66 Start: 49162, Stop: 48602, Start Num: 14
Candidate Starts for Kabluna_66:
(Start: 11 @49210 has 1 MA's), (Start: 14 @49162 has 7 MA's), (18, 49114), (28, 49015), (29, 49012), (36, 48898), (43, 48844), (49, 48754), (61, 48625),

Gene: KidneyBean_63 Start: 49975, Stop: 49511, Start Num: 15
Candidate Starts for KidneyBean_63:
(Start: 15 @49975 has 24 MA's), (19, 49936), (25, 49864), (47, 49615), (49, 49603), (55, 49555),

Gene: Kurt_63 Start: 50212, Stop: 49748, Start Num: 15
Candidate Starts for Kurt_63:
(10, 50266), (Start: 11 @50257 has 1 MA's), (Start: 15 @50212 has 24 MA's), (21, 50161), (25, 50101), (47, 49852), (49, 49840), (55, 49792),

Gene: Marietta_64 Start: 46706, Stop: 46137, Start Num: 15
Candidate Starts for Marietta_64:
(Start: 15 @46706 has 24 MA's), (18, 46679), (24, 46610), (26, 46589), (27, 46586), (30, 46568), (31, 46532), (41, 46442), (49, 46328), (50, 46319), (53, 46295), (57, 46229), (60, 46208),

Gene: MerCougar_65 Start: 50544, Stop: 50023, Start Num: 14
Candidate Starts for MerCougar_65:
(Start: 14 @50544 has 7 MA's), (28, 50397), (32, 50310), (36, 50280), (43, 50226), (49, 50136), (56, 50052), (58, 50028),

Gene: NadineRae_63 Start: 46312, Stop: 45740, Start Num: 15
Candidate Starts for NadineRae_63:
(2, 46678), (4, 46633), (6, 46600), (9, 46459), (Start: 15 @46312 has 24 MA's), (18, 46285), (24, 46216), (26, 46195), (27, 46192), (30, 46174), (31, 46138), (41, 46048), (42, 46033), (49, 45934), (50, 45925), (53, 45901), (57, 45832), (60, 45811),

Gene: NatB6_63 Start: 49269, Stop: 48805, Start Num: 15
Candidate Starts for NatB6_63:
(10, 49323), (Start: 11 @49314 has 1 MA's), (Start: 15 @49269 has 24 MA's), (21, 49218), (25, 49158), (47, 48909), (49, 48897), (55, 48849),

Gene: NosilaM_65 Start: 49839, Stop: 49279, Start Num: 14
Candidate Starts for NosilaM_65:
(Start: 11 @49887 has 1 MA's), (Start: 14 @49839 has 7 MA's), (18, 49791), (28, 49692), (29, 49689), (36, 49575), (43, 49521), (49, 49431), (56, 49347), (61, 49302),

Gene: NovumRegina_63 Start: 49578, Stop: 49114, Start Num: 15
Candidate Starts for NovumRegina_63:
(10, 49632), (Start: 11 @49623 has 1 MA's), (Start: 15 @49578 has 24 MA's), (21, 49527), (25, 49467), (47, 49218), (49, 49206), (55, 49158),

Gene: Outis_64 Start: 50057, Stop: 49536, Start Num: 14
Candidate Starts for Outis_64:
(8, 50237), (Start: 14 @50057 has 7 MA's), (28, 49910), (32, 49823), (36, 49793), (43, 49739), (49, 49649), (56, 49565), (58, 49541),

Gene: Patio_65 Start: 50000, Stop: 49473, Start Num: 16

Candidate Starts for Patio_65:
(12, 50018), (Start: 16 @50000 has 3 MA's), (23, 49925), (36, 49766), (43, 49712), (48, 49625), (50, 49613),

Gene: Phomeo_62 Start: 49847, Stop: 49383, Start Num: 15
Candidate Starts for Phomeo_62:
(Start: 15 @49847 has 24 MA's), (19, 49808), (25, 49736), (47, 49487), (49, 49475), (55, 49427),

Gene: Pleakley_72 Start: 49500, Stop: 48988, Start Num: 15
Candidate Starts for Pleakley_72:
(5, 49845), (Start: 15 @49500 has 24 MA's), (19, 49461), (21, 49449), (22, 49419), (36, 49254), (43, 49200), (48, 49113), (50, 49101),

Gene: Skysand_65 Start: 50481, Stop: 49972, Start Num: 16
Candidate Starts for Skysand_65:
(12, 50499), (Start: 16 @50481 has 3 MA's), (28, 50358), (36, 50247), (43, 50193), (48, 50106), (50, 50094),

Gene: StarStruck_64 Start: 50057, Stop: 49536, Start Num: 14
Candidate Starts for StarStruck_64:
(8, 50237), (Start: 14 @50057 has 7 MA's), (28, 49910), (32, 49823), (36, 49793), (43, 49739), (49, 49649), (56, 49565), (58, 49541),

Gene: Sukkupi_64 Start: 48540, Stop: 47968, Start Num: 15
Candidate Starts for Sukkupi_64:
(3, 48885), (7, 48750), (Start: 15 @48540 has 24 MA's), (18, 48513), (24, 48444), (26, 48423), (27, 48420), (30, 48402), (31, 48366), (35, 48312), (41, 48276), (49, 48162), (50, 48153), (51, 48135), (53, 48129), (57, 48060), (59, 48045), (60, 48039),

Gene: SuperSulley_65 Start: 50432, Stop: 49824, Start Num: 11
Candidate Starts for SuperSulley_65:
(Start: 11 @50432 has 1 MA's), (Start: 14 @50384 has 7 MA's), (18, 50336), (28, 50237), (29, 50234), (33, 50144), (36, 50120), (43, 50066), (49, 49976), (56, 49892), (61, 49847),

Gene: Tracker_63 Start: 49020, Stop: 48556, Start Num: 15
Candidate Starts for Tracker_63:
(Start: 15 @49020 has 24 MA's), (19, 48981), (25, 48909), (47, 48660), (49, 48648), (55, 48600),

Gene: Turuncu_66 Start: 50072, Stop: 49566, Start Num: 15
Candidate Starts for Turuncu_66:
(Start: 15 @50072 has 24 MA's), (22, 49994), (26, 49952), (34, 49850), (36, 49832), (39, 49808), (46, 49724), (54, 49655),

Gene: Wheezy_63 Start: 49228, Stop: 48764, Start Num: 15
Candidate Starts for Wheezy_63:
(Start: 15 @49228 has 24 MA's), (19, 49189), (25, 49117), (47, 48868), (49, 48856), (55, 48808),

Gene: WhoseManz_63 Start: 46322, Stop: 45750, Start Num: 15
Candidate Starts for WhoseManz_63:
(6, 46658), (Start: 15 @46322 has 24 MA's), (18, 46295), (24, 46226), (26, 46205), (27, 46202), (30, 46184), (31, 46148), (41, 46058), (49, 45944), (50, 45935), (51, 45917), (53, 45911), (57, 45842), (60, 45821),

Gene: Yndexa_64 Start: 48540, Stop: 47968, Start Num: 15
Candidate Starts for Yndexa_64:
(3, 48885), (7, 48750), (Start: 15 @48540 has 24 MA's), (18, 48513), (24, 48444), (26, 48423), (27, 48420), (30, 48402), (31, 48366), (35, 48312), (41, 48276), (49, 48162), (50, 48153), (51, 48135), (53, 48129), (57, 48060), (59, 48045), (60, 48039),