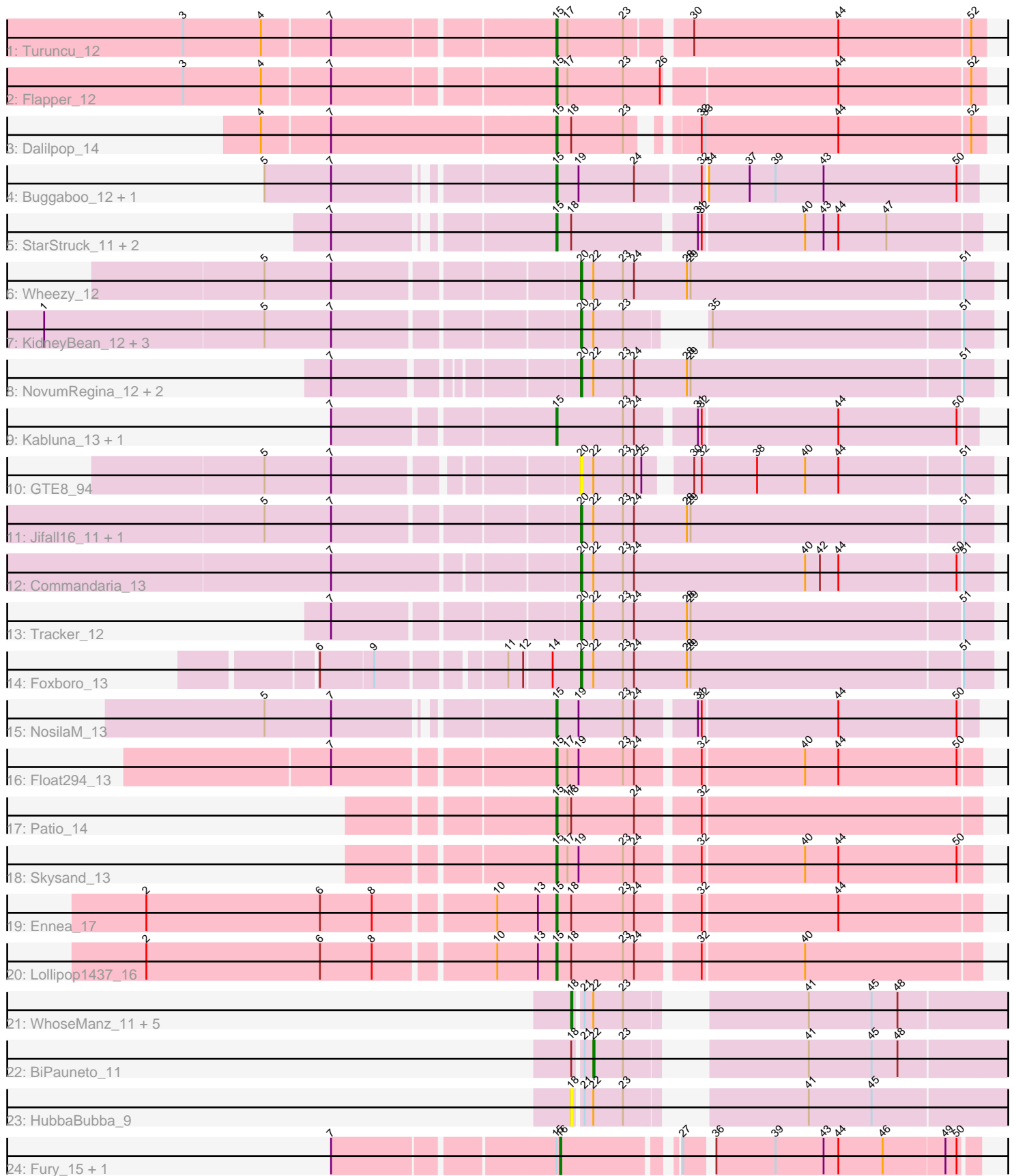


Pham 2266



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 2266 Report

This analysis was run 04/28/24 on database version 559.

Pham number 2266 has 40 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Turuncu_12
- Track 2 : Flapper_12
- Track 3 : Dalilpop_14
- Track 4 : Buggaboo_12, SuperSulley_12
- Track 5 : StarStruck_11, Outis_11, MerCougar_11
- Track 6 : Wheezy_12
- Track 7 : KidneyBean_12, Kurt_12, Phomeo_11, Emianna_12
- Track 8 : NovumRegina_12, GrootJr_14, Arti_12
- Track 9 : Kabluna_13, Bonum_13
- Track 10 : GTE8_94
- Track 11 : Jifall16_11, NatB6_12
- Track 12 : Commandaria_13
- Track 13 : Tracker_12
- Track 14 : Foxboro_13
- Track 15 : NosilaM_13
- Track 16 : Float294_13
- Track 17 : Patio_14
- Track 18 : Skysand_13
- Track 19 : Ennea_17
- Track 20 : Lollipop1437_16
- Track 21 : WhoseManz_11, Marietta_11, IDyn_11, Sukkupi_11, NadineRae_10, Yndexa_11
- Track 22 : BiPauneto_11
- Track 23 : HubbaBubba_9
- Track 24 : Fury_15, Pleakley_15

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 16 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bonum_13, Buggaboo_12, Dalilpop_14, Ennea_17, Flapper_12, Float294_13, Kabluna_13, Lollipop1437_16, MerCougar_11, NosilaM_13, Outis_11, Patio_14,

Skysand_13, StarStruck_11, SuperSulley_12, Turuncu_12,

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

- Fury_15, Pleakley_15,

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

- Arti_12, BiPauneto_11, Commandaria_13, Emianna_12, Foxboro_13, GTE8_94, GrootJr_14, HubbaBubba_9, IDyn_11, Jifall16_11, KidneyBean_12, Kurt_12, Marietta_11, NadineRae_10, NatB6_12, NovumRegina_12, Phomeo_11, Sukkupi_11, Tracker_12, Wheezy_12, WhoseManz_11, Yndexa_11,

Summary by start number:

Start 15:

- Found in 18 of 40 (45.0%) of genes in pham
- Manual Annotations of this start: 16 of 37
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Bonum_13 (CR2), Buggaboo_12 (CR2), Dalilpop_14 (CR1), Ennea_17 (CR3), Flapper_12 (CR1), Float294_13 (CR3), Kabluna_13 (CR2), Lollipop1437_16 (CR3), MerCougar_11 (CR2), NosilaM_13 (CR2), Outis_11 (CR2), Patio_14 (CR3), Skysand_13 (CR3), StarStruck_11 (CR2), SuperSulley_12 (CR2), Turuncu_12 (CR1),

Start 16:

- Found in 2 of 40 (5.0%) of genes in pham
- Manual Annotations of this start: 2 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fury_15 (CR5), Pleakley_15 (CR5),

Start 18:

- Found in 15 of 40 (37.5%) of genes in pham
- Manual Annotations of this start: 6 of 37
- Called 46.7% of time when present
- Phage (with cluster) where this start called: HubbaBubba_9 (CR4), IDyn_11 (CR4), Marietta_11 (CR4), NadineRae_10 (CR4), Sukkupi_11 (CR4), WhoseManz_11 (CR4), Yndexa_11 (CR4),

Start 20:

- Found in 14 of 40 (35.0%) of genes in pham
- Manual Annotations of this start: 12 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arti_12 (CR2), Commandaria_13 (CR2), Emianna_12 (CR2), Foxboro_13 (CR2), GTE8_94 (CR2), GrootJr_14 (CR2), Jifall16_11 (CR2), KidneyBean_12 (CR2), Kurt_12 (CR2), NatB6_12 (CR2), NovumRegina_12 (CR2), Phomeo_11 (CR2), Tracker_12 (CR2), Wheezy_12 (CR2),

Start 22:

- Found in 22 of 40 (55.0%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 4.5% of time when present
- Phage (with cluster) where this start called: BiPauneto_11 (CR4),

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 15 was manually annotated 8 times for cluster CR2.
- Start number 20 was manually annotated 12 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 15 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 18 was manually annotated 6 times for cluster CR4.
- Start number 22 was manually annotated 1 time for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 16 was manually annotated 2 times for cluster CR5.

Gene Information:

Gene: Arti_12 Start: 7026, Stop: 7352, Start Num: 20

Candidate Starts for Arti_12:

(7, 6858), (Start: 20 @7026 has 12 MA's), (Start: 22 @7035 has 1 MA's), (23, 7059), (24, 7068), (28, 7110), (29, 7113), (51, 7329),

Gene: BiPauneto_11 Start: 5203, Stop: 5499, Start Num: 22

Candidate Starts for BiPauneto_11:

(Start: 18 @5191 has 6 MA's), (21, 5197), (Start: 22 @5203 has 1 MA's), (23, 5227), (41, 5335), (45, 5386), (48, 5407),

Gene: Bonum_13 Start: 6910, Stop: 7236, Start Num: 15

Candidate Starts for Bonum_13:

(7, 6745), (Start: 15 @6910 has 16 MA's), (23, 6964), (24, 6973), (31, 7015), (32, 7018), (44, 7126), (50, 7222),

Gene: Buggaboo_12 Start: 6420, Stop: 6752, Start Num: 15

Candidate Starts for Buggaboo_12:

(5, 6210), (7, 6264), (Start: 15 @6420 has 16 MA's), (19, 6438), (24, 6483), (32, 6534), (34, 6537), (37, 6570), (39, 6591), (43, 6630), (50, 6738),

Gene: Commandaria_13 Start: 6756, Stop: 7082, Start Num: 20

Candidate Starts for Commandaria_13:

(7, 6579), (Start: 20 @6756 has 12 MA's), (Start: 22 @6765 has 1 MA's), (23, 6789), (24, 6798), (40, 6936), (42, 6948), (44, 6963), (50, 7056), (51, 7059),

Gene: Dalilpop_14 Start: 7574, Stop: 7891, Start Num: 15

Candidate Starts for Dalilpop_14:

(4, 7343), (7, 7397), (Start: 15 @7574 has 16 MA's), (Start: 18 @7586 has 6 MA's), (23, 7628), (32, 7664), (33, 7667), (44, 7775), (52, 7880),

Gene: Emianna_12 Start: 6986, Stop: 7270, Start Num: 20

Candidate Starts for Emianna_12:

(1, 6578), (5, 6755), (7, 6809), (Start: 20 @6986 has 12 MA's), (Start: 22 @6995 has 1 MA's), (23, 7019), (35, 7049), (51, 7247),

Gene: Ennea_17 Start: 8391, Stop: 8720, Start Num: 15

Candidate Starts for Ennea_17:

(2, 8070), (6, 8211), (8, 8253), (10, 8343), (13, 8376), (Start: 15 @8391 has 16 MA's), (Start: 18 @8403 has 6 MA's), (23, 8445), (24, 8454), (32, 8499), (44, 8607),

Gene: Flapper_12 Start: 6402, Stop: 6734, Start Num: 15

Candidate Starts for Flapper_12:

(3, 6117), (4, 6180), (7, 6234), (Start: 15 @6402 has 16 MA's), (17, 6411), (23, 6456), (26, 6486), (44, 6618), (52, 6723),

Gene: Float294_13 Start: 6940, Stop: 7269, Start Num: 15

Candidate Starts for Float294_13:

(7, 6775), (Start: 15 @6940 has 16 MA's), (17, 6949), (19, 6958), (23, 6994), (24, 7003), (32, 7048), (40, 7129), (44, 7156), (50, 7252),

Gene: Foxboro_13 Start: 7304, Stop: 7630, Start Num: 20

Candidate Starts for Foxboro_13:

(6, 7121), (9, 7163), (11, 7253), (12, 7265), (14, 7286), (Start: 20 @7304 has 12 MA's), (Start: 22 @7313 has 1 MA's), (23, 7337), (24, 7346), (28, 7388), (29, 7391), (51, 7607),

Gene: Fury_15 Start: 6692, Stop: 6997, Start Num: 16

Candidate Starts for Fury_15:

(7, 6521), (Start: 15 @6689 has 16 MA's), (Start: 16 @6692 has 2 MA's), (27, 6773), (36, 6791), (39, 6839), (43, 6878), (44, 6890), (46, 6926), (49, 6974), (50, 6983),

Gene: GTE8_94 Start: 67306, Stop: 67617, Start Num: 20

Candidate Starts for GTE8_94:

(5, 67084), (7, 67138), (Start: 20 @67306 has 12 MA's), (Start: 22 @67315 has 1 MA's), (23, 67339), (24, 67348), (25, 67354), (30, 67381), (32, 67387), (38, 67432), (40, 67471), (44, 67498), (51, 67594),

Gene: GrootJr_14 Start: 7421, Stop: 7747, Start Num: 20

Candidate Starts for GrootJr_14:

(7, 7253), (Start: 20 @7421 has 12 MA's), (Start: 22 @7430 has 1 MA's), (23, 7454), (24, 7463), (28, 7505), (29, 7508), (51, 7724),

Gene: HubbaBubba_9 Start: 4126, Stop: 4434, Start Num: 18

Candidate Starts for HubbaBubba_9:

(Start: 18 @4126 has 6 MA's), (21, 4132), (Start: 22 @4138 has 1 MA's), (23, 4162), (41, 4270), (45, 4321),

Gene: IDyn_11 Start: 5517, Stop: 5825, Start Num: 18

Candidate Starts for IDyn_11:

(Start: 18 @5517 has 6 MA's), (21, 5523), (Start: 22 @5529 has 1 MA's), (23, 5553), (41, 5661), (45, 5712), (48, 5733),

Gene: Jifall16_11 Start: 6461, Stop: 6787, Start Num: 20

Candidate Starts for Jifall16_11:

(5, 6230), (7, 6284), (Start: 20 @6461 has 12 MA's), (Start: 22 @6470 has 1 MA's), (23, 6494), (24, 6503), (28, 6545), (29, 6548), (51, 6764),

Gene: Kabluna_13 Start: 6301, Stop: 6627, Start Num: 15

Candidate Starts for Kabluna_13:

(7, 6136), (Start: 15 @6301 has 16 MA's), (23, 6355), (24, 6364), (31, 6406), (32, 6409), (44, 6517), (50, 6613),

Gene: KidneyBean_12 Start: 6803, Stop: 7087, Start Num: 20

Candidate Starts for KidneyBean_12:

(1, 6395), (5, 6572), (7, 6626), (Start: 20 @6803 has 12 MA's), (Start: 22 @6812 has 1 MA's), (23, 6836), (35, 6866), (51, 7064),

Gene: Kurt_12 Start: 6986, Stop: 7270, Start Num: 20

Candidate Starts for Kurt_12:

(1, 6578), (5, 6755), (7, 6809), (Start: 20 @6986 has 12 MA's), (Start: 22 @6995 has 1 MA's), (23, 7019), (35, 7049), (51, 7247),

Gene: Lollipop1437_16 Start: 8379, Stop: 8708, Start Num: 15

Candidate Starts for Lollipop1437_16:

(2, 8058), (6, 8199), (8, 8241), (10, 8331), (13, 8364), (Start: 15 @8379 has 16 MA's), (Start: 18 @8391 has 6 MA's), (23, 8433), (24, 8442), (32, 8487), (40, 8568),

Gene: Marietta_11 Start: 5219, Stop: 5527, Start Num: 18

Candidate Starts for Marietta_11:

(Start: 18 @5219 has 6 MA's), (21, 5225), (Start: 22 @5231 has 1 MA's), (23, 5255), (41, 5363), (45, 5414), (48, 5435),

Gene: MerCougar_11 Start: 6312, Stop: 6641, Start Num: 15

Candidate Starts for MerCougar_11:

(7, 6156), (Start: 15 @6312 has 16 MA's), (Start: 18 @6324 has 6 MA's), (31, 6417), (32, 6420), (40, 6501), (43, 6516), (44, 6528), (47, 6567),

Gene: NadineRae_10 Start: 4642, Stop: 4950, Start Num: 18

Candidate Starts for NadineRae_10:

(Start: 18 @4642 has 6 MA's), (21, 4648), (Start: 22 @4654 has 1 MA's), (23, 4678), (41, 4786), (45, 4837), (48, 4858),

Gene: NatB6_12 Start: 7068, Stop: 7394, Start Num: 20

Candidate Starts for NatB6_12:

(5, 6837), (7, 6891), (Start: 20 @7068 has 12 MA's), (Start: 22 @7077 has 1 MA's), (23, 7101), (24, 7110), (28, 7152), (29, 7155), (51, 7371),

Gene: NosilaM_13 Start: 7180, Stop: 7506, Start Num: 15

Candidate Starts for NosilaM_13:

(5, 6970), (7, 7024), (Start: 15 @7180 has 16 MA's), (19, 7198), (23, 7234), (24, 7243), (31, 7285), (32, 7288), (44, 7396), (50, 7492),

Gene: NovumRegina_12 Start: 7420, Stop: 7746, Start Num: 20

Candidate Starts for NovumRegina_12:

(7, 7252), (Start: 20 @7420 has 12 MA's), (Start: 22 @7429 has 1 MA's), (23, 7453), (24, 7462), (28, 7504), (29, 7507), (51, 7723),

Gene: Outis_11 Start: 6006, Stop: 6335, Start Num: 15

Candidate Starts for Outis_11:

(7, 5850), (Start: 15 @6006 has 16 MA's), (Start: 18 @6018 has 6 MA's), (31, 6111), (32, 6114), (40, 6195), (43, 6210), (44, 6222), (47, 6261),

Gene: Patio_14 Start: 7616, Stop: 7945, Start Num: 15

Candidate Starts for Patio_14:

(Start: 15 @7616 has 16 MA's), (17, 7625), (Start: 18 @7628 has 6 MA's), (24, 7679), (32, 7724),

Gene: Phomeo_11 Start: 6639, Stop: 6923, Start Num: 20

Candidate Starts for Phomeo_11:

(1, 6231), (5, 6408), (7, 6462), (Start: 20 @6639 has 12 MA's), (Start: 22 @6648 has 1 MA's), (23, 6672), (35, 6702), (51, 6900),

Gene: Pleakley_15 Start: 6692, Stop: 6997, Start Num: 16

Candidate Starts for Pleakley_15:

(7, 6521), (Start: 15 @6689 has 16 MA's), (Start: 16 @6692 has 2 MA's), (27, 6773), (36, 6791), (39, 6839), (43, 6878), (44, 6890), (46, 6926), (49, 6974), (50, 6983),

Gene: Skysand_13 Start: 6942, Stop: 7271, Start Num: 15

Candidate Starts for Skysand_13:

(Start: 15 @6942 has 16 MA's), (17, 6951), (19, 6960), (23, 6996), (24, 7005), (32, 7050), (40, 7131), (44, 7158), (50, 7254),

Gene: StarStruck_11 Start: 6006, Stop: 6335, Start Num: 15

Candidate Starts for StarStruck_11:

(7, 5850), (Start: 15 @6006 has 16 MA's), (Start: 18 @6018 has 6 MA's), (31, 6111), (32, 6114), (40, 6195), (43, 6210), (44, 6222), (47, 6261),

Gene: Sukkupi_11 Start: 5082, Stop: 5390, Start Num: 18

Candidate Starts for Sukkupi_11:

(Start: 18 @5082 has 6 MA's), (21, 5088), (Start: 22 @5094 has 1 MA's), (23, 5118), (41, 5226), (45, 5277), (48, 5298),

Gene: SuperSulley_12 Start: 6420, Stop: 6752, Start Num: 15

Candidate Starts for SuperSulley_12:

(5, 6210), (7, 6264), (Start: 15 @6420 has 16 MA's), (19, 6438), (24, 6483), (32, 6534), (34, 6537), (37, 6570), (39, 6591), (43, 6630), (50, 6738),

Gene: Tracker_12 Start: 6789, Stop: 7115, Start Num: 20

Candidate Starts for Tracker_12:

(7, 6612), (Start: 20 @6789 has 12 MA's), (Start: 22 @6798 has 1 MA's), (23, 6822), (24, 6831), (28, 6873), (29, 6876), (51, 7092),

Gene: Turuncu_12 Start: 5920, Stop: 6249, Start Num: 15

Candidate Starts for Turuncu_12:

(3, 5635), (4, 5698), (7, 5752), (Start: 15 @5920 has 16 MA's), (17, 5929), (23, 5974), (30, 6016), (44, 6133), (52, 6238),

Gene: Wheezy_12 Start: 7047, Stop: 7373, Start Num: 20

Candidate Starts for Wheezy_12:

(5, 6816), (7, 6870), (Start: 20 @7047 has 12 MA's), (Start: 22 @7056 has 1 MA's), (23, 7080), (24, 7089), (28, 7131), (29, 7134), (51, 7350),

Gene: WhoseManz_11 Start: 4830, Stop: 5138, Start Num: 18

Candidate Starts for WhoseManz_11:

(Start: 18 @4830 has 6 MA's), (21, 4836), (Start: 22 @4842 has 1 MA's), (23, 4866), (41, 4974), (45, 5025), (48, 5046),

Gene: Yndexa_11 Start: 5082, Stop: 5390, Start Num: 18

Candidate Starts for Yndexa_11:

(Start: 18 @5082 has 6 MA's), (21, 5088), (Start: 22 @5094 has 1 MA's), (23, 5118), (41, 5226), (45, 5277), (48, 5298),