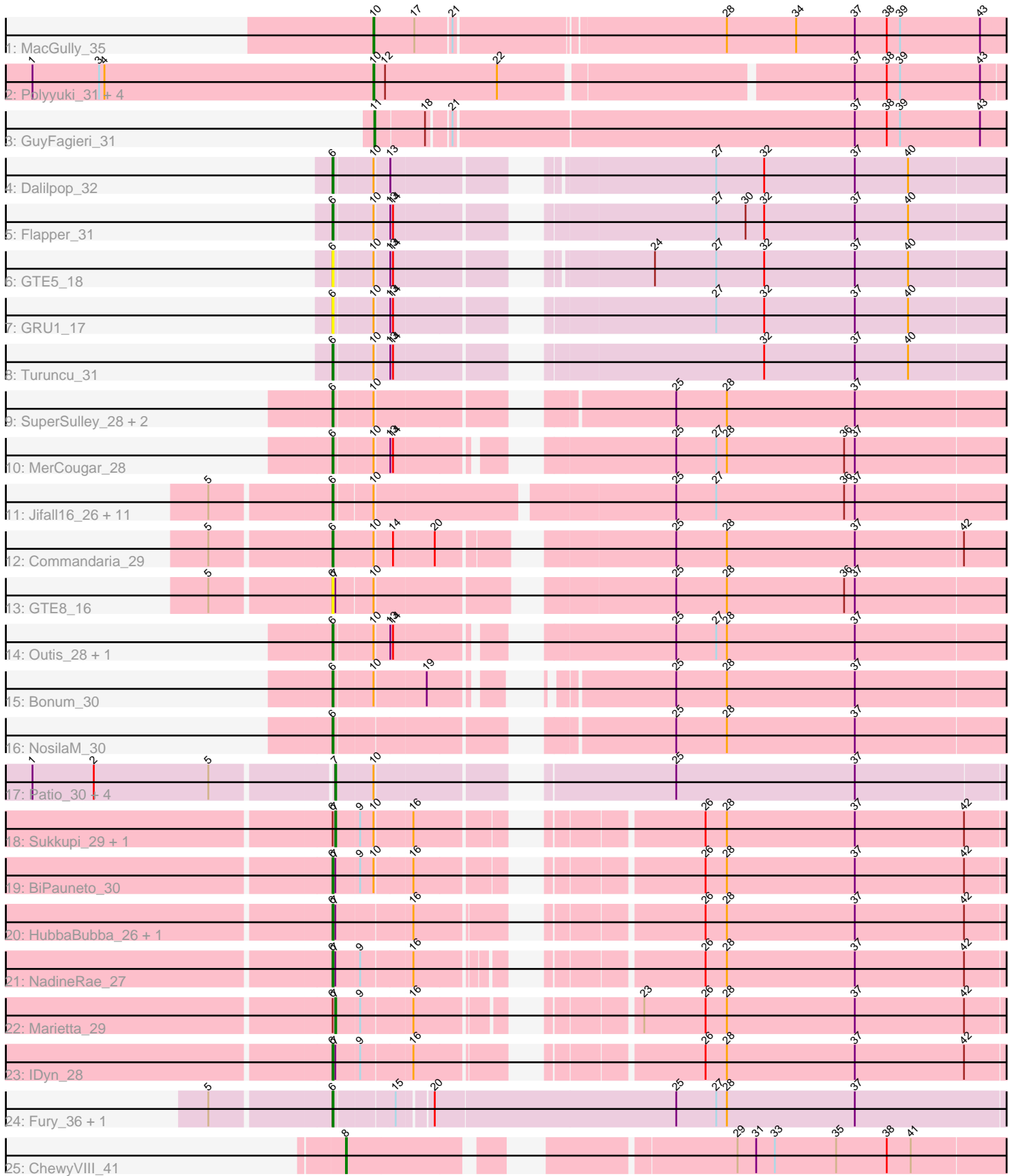


Pham 72183



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 72183 Report

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

Pham number 72183 has 50 members, 6 are drafts.

Phages represented in each track:

- Track 1 : MacGully_35
- Track 2 : Polyuyuki_31, Braxoaddie_31, Apiary_31, CoffeeBean_31, Maselop_31
- Track 3 : GuyFagieri_31
- Track 4 : Dalilpop_32
- Track 5 : Flapper_31
- Track 6 : GTE5_18
- Track 7 : GRU1_17
- Track 8 : Turuncu_31
- Track 9 : SuperSulley_28, Kabluna_30, Buggaboo_28
- Track 10 : MerCougar_28
- Track 11 : Jifall16_26, GrootJr_29, Tracker_27, Phomeo_26, Arti_27, Foxboro_28, NatB6_27, Emianna_27, Kurt_27, Wheezy_27, KidneyBean_27, NovumRegina_27
- Track 12 : Commandaria_29
- Track 13 : GTE8_16
- Track 14 : Outis_28, StarStruck_28
- Track 15 : Bonum_30
- Track 16 : NosilaM_30
- Track 17 : Patio_30, Ennea_33, Float294_29, Skysand_29, Lollipop1437_32
- Track 18 : Sukkupi_29, Yndexa_29
- Track 19 : BiPauneto_30
- Track 20 : HubbaBubba_26, WhoseManz_29
- Track 21 : NadineRae_27
- Track 22 : Marietta_29
- Track 23 : IDyn_28
- Track 24 : Fury_36, Pleakley_36
- Track 25 : ChewyVIII_41

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

The start number called the most often in the published annotations is 6, it was called in 29 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arti_27, BiPauneto_30, Bonum_30, Buggaboo_28, Commandaria_29, Dalilpop_32, Emianna_27, Flapper_31, Foxboro_28, Fury_36, GRU1_17, GTE5_18, GTE8_16, GrootJr_29, HubbaBubba_26, IDyn_28, Jifall16_26, Kabluna_30, KidneyBean_27, Kurt_27, MerCougar_28, NadineRae_27, NatB6_27, NosilaM_30, NovumRegina_27, Outis_28, Phomeo_26, Pleakley_36, StarStruck_28, SuperSulley_28, Tracker_27, Turuncu_31, Wheezy_27, WhoseManz_29,

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

- Marietta_29, Sukkupi_29, Yndexa_29,

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

- Apiary_31, Braxoaddie_31, ChewyVIII_41, CoffeeBean_31, Ennea_33, Float294_29, GuyFagieri_31, Lollipop1437_32, MacGully_35, Maselop_31, Patio_30, Polyyuki_31, Skysand_29,

Summary by start number:

Start 6:

- Found in 37 of 50 (74.0%) of genes in pham
- Manual Annotations of this start: 29 of 44
- Called 91.9% of time when present
- Phage (with cluster) where this start called: Arti_27 (CR2), BiPauneto_30 (CR4), Bonum_30 (CR2), Buggaboo_28 (CR2), Commandaria_29 (CR2), Dalilpop_32 (CR1), Emianna_27 (CR2), Flapper_31 (CR1), Foxboro_28 (CR2), Fury_36 (CR5), GRU1_17 (CR1), GTE5_18 (CR1), GTE8_16 (CR2), GrootJr_29 (CR2), HubbaBubba_26 (CR4), IDyn_28 (CR4), Jifall16_26 (CR2), Kabluna_30 (CR2), KidneyBean_27 (CR2), Kurt_27 (CR2), MerCougar_28 (CR2), NadineRae_27 (CR4), NatB6_27 (CR2), NosilaM_30 (CR2), NovumRegina_27 (CR2), Outis_28 (CR2), Phomeo_26 (CR2), Pleakley_36 (CR5), StarStruck_28 (CR2), SuperSulley_28 (CR2), Tracker_27 (CR2), Turuncu_31 (CR1), Wheezy_27 (CR2), WhoseManz_29 (CR4),

Start 7:

- Found in 14 of 50 (28.0%) of genes in pham
- Manual Annotations of this start: 8 of 44
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Ennea_33 (CR3), Float294_29 (CR3), Lollipop1437_32 (CR3), Marietta_29 (CR4), Patio_30 (CR3), Skysand_29 (CR3), Sukkupi_29 (CR4), Yndexa_29 (CR4),

Start 8:

- Found in 1 of 50 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChewyVIII_41 (singleton),

Start 10:

- Found in 40 of 50 (80.0%) of genes in pham
- Manual Annotations of this start: 5 of 44
- Called 15.0% of time when present
- Phage (with cluster) where this start called: Apiary_31 (CR), Braxoaddie_31 (CR), CoffeeBean_31 (CR), MacGully_35 (CR), Maselop_31 (CR), Polyyuki_31 (CR),

Start 11:

- Found in 1 of 50 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GuyFagieri_31 (CR),

Summary by clusters:

There are 7 clusters represented in this pham: CR2, CR3, singleton, CR1, CR4, CR5, CR,

Info for manual annotations of cluster CR:

- Start number 10 was manually annotated 5 times for cluster CR.
- Start number 11 was manually annotated 1 time for cluster CR.

Info for manual annotations of cluster CR1:

- Start number 6 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 6 was manually annotated 20 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 7 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 6 was manually annotated 4 times for cluster CR4.
- Start number 7 was manually annotated 3 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 6 was manually annotated 2 times for cluster CR5.

Gene Information:

Gene: Apiary_31 Start: 18851, Stop: 19534, Start Num: 10

Candidate Starts for Apiary_31:

(1, 18467), (3, 18542), (4, 18548), (Start: 10 @18851 has 5 MA's), (12, 18863), (22, 18989), (37, 19367), (38, 19403), (39, 19418), (43, 19508),

Gene: Arti_27 Start: 16857, Stop: 17573, Start Num: 6

Candidate Starts for Arti_27:

(5, 16731), (Start: 6 @16857 has 29 MA's), (Start: 10 @16896 has 5 MA's), (25, 17205), (27, 17250), (36, 17394), (37, 17406),

Gene: BiPauneto_30 Start: 16755, Stop: 17429, Start Num: 6

Candidate Starts for BiPauneto_30:

(Start: 6 @16755 has 29 MA's), (Start: 7 @16758 has 8 MA's), (9, 16782), (Start: 10 @16797 has 5 MA's), (16, 16836), (26, 17094), (28, 17118), (37, 17262), (42, 17385),

Gene: Bonum_30 Start: 17258, Stop: 17914, Start Num: 6

Candidate Starts for Bonum_30:

(Start: 6 @17258 has 29 MA's), (Start: 10 @17297 has 5 MA's), (19, 17351), (25, 17546), (28, 17603), (37, 17747),

Gene: Braxoaddie_31 Start: 18840, Stop: 19523, Start Num: 10

Candidate Starts for Braxoaddie_31:

(1, 18456), (3, 18531), (4, 18537), (Start: 10 @18840 has 5 MA's), (12, 18852), (22, 18978), (37, 19356), (38, 19392), (39, 19407), (43, 19497),

Gene: Buggaboo_28 Start: 17716, Stop: 18399, Start Num: 6

Candidate Starts for Buggaboo_28:

(Start: 6 @17716 has 29 MA's), (Start: 10 @17755 has 5 MA's), (25, 18031), (28, 18088), (37, 18232),

Gene: ChewyVIII_41 Start: 24435, Stop: 25100, Start Num: 8

Candidate Starts for ChewyVIII_41:

(Start: 8 @24435 has 1 MA's), (29, 24798), (31, 24819), (33, 24840), (35, 24909), (38, 24966), (41, 24993),

Gene: CoffeeBean_31 Start: 18795, Stop: 19478, Start Num: 10

Candidate Starts for CoffeeBean_31:

(1, 18411), (3, 18486), (4, 18492), (Start: 10 @18795 has 5 MA's), (12, 18807), (22, 18933), (37, 19311), (38, 19347), (39, 19362), (43, 19452),

Gene: Commandaria_29 Start: 18169, Stop: 18864, Start Num: 6

Candidate Starts for Commandaria_29:

(5, 18043), (Start: 6 @18169 has 29 MA's), (Start: 10 @18214 has 5 MA's), (14, 18232), (20, 18277), (25, 18496), (28, 18553), (37, 18697), (42, 18817),

Gene: Dalilpop_32 Start: 19256, Stop: 19936, Start Num: 6

Candidate Starts for Dalilpop_32:

(Start: 6 @19256 has 29 MA's), (Start: 10 @19295 has 5 MA's), (13, 19310), (27, 19613), (32, 19667), (37, 19769), (40, 19829),

Gene: Emianna_27 Start: 17896, Stop: 18612, Start Num: 6

Candidate Starts for Emianna_27:

(5, 17770), (Start: 6 @17896 has 29 MA's), (Start: 10 @17935 has 5 MA's), (25, 18244), (27, 18289), (36, 18433), (37, 18445),

Gene: Ennea_33 Start: 18550, Stop: 19236, Start Num: 7

Candidate Starts for Ennea_33:

(1, 18226), (2, 18295), (5, 18424), (Start: 7 @18550 has 8 MA's), (Start: 10 @18589 has 5 MA's), (25, 18871), (37, 19072),

Gene: Flapper_31 Start: 18331, Stop: 19017, Start Num: 6

Candidate Starts for Flapper_31:

(Start: 6 @18331 has 29 MA's), (Start: 10 @18370 has 5 MA's), (13, 18385), (14, 18388), (27, 18694), (30, 18727), (32, 18748), (37, 18850), (40, 18910),

Gene: Float294_29 Start: 17992, Stop: 18678, Start Num: 7

Candidate Starts for Float294_29:

(1, 17668), (2, 17737), (5, 17866), (Start: 7 @17992 has 8 MA's), (Start: 10 @18031 has 5 MA's), (25, 18313), (37, 18514),

Gene: Foxboro_28 Start: 18402, Stop: 19118, Start Num: 6

Candidate Starts for Foxboro_28:

(5, 18276), (Start: 6 @18402 has 29 MA's), (Start: 10 @18441 has 5 MA's), (25, 18750), (27, 18795), (36, 18939), (37, 18951),

Gene: Fury_36 Start: 17574, Stop: 18302, Start Num: 6

Candidate Starts for Fury_36:

(5, 17448), (Start: 6 @17574 has 29 MA's), (15, 17634), (20, 17667), (25, 17934), (27, 17979), (28, 17991), (37, 18135),

Gene: GRU1_17 Start: 10216, Stop: 10902, Start Num: 6

Candidate Starts for GRU1_17:

(Start: 6 @10216 has 29 MA's), (Start: 10 @10255 has 5 MA's), (13, 10270), (14, 10273), (27, 10579), (32, 10633), (37, 10735), (40, 10795),

Gene: GTE5_18 Start: 11225, Stop: 11905, Start Num: 6

Candidate Starts for GTE5_18:

(Start: 6 @11225 has 29 MA's), (Start: 10 @11264 has 5 MA's), (13, 11279), (14, 11282), (24, 11513), (27, 11582), (32, 11636), (37, 11738), (40, 11798),

Gene: GTE8_16 Start: 11182, Stop: 11877, Start Num: 6

Candidate Starts for GTE8_16:

(5, 11056), (Start: 6 @11182 has 29 MA's), (Start: 7 @11185 has 8 MA's), (Start: 10 @11224 has 5 MA's), (25, 11509), (28, 11566), (36, 11698), (37, 11710),

Gene: GrootJr_29 Start: 17252, Stop: 17968, Start Num: 6

Candidate Starts for GrootJr_29:

(5, 17126), (Start: 6 @17252 has 29 MA's), (Start: 10 @17291 has 5 MA's), (25, 17600), (27, 17645), (36, 17789), (37, 17801),

Gene: GuyFagieri_31 Start: 18627, Stop: 19316, Start Num: 11

Candidate Starts for GuyFagieri_31:

(Start: 11 @18627 has 1 MA's), (18, 18681), (21, 18702), (37, 19146), (38, 19182), (39, 19197), (43, 19287),

Gene: HubbaBubba_26 Start: 13773, Stop: 14447, Start Num: 6

Candidate Starts for HubbaBubba_26:

(Start: 6 @13773 has 29 MA's), (Start: 7 @13776 has 8 MA's), (16, 13854), (26, 14112), (28, 14136), (37, 14280), (42, 14403),

Gene: IDyn_28 Start: 15169, Stop: 15843, Start Num: 6

Candidate Starts for IDyn_28:

(Start: 6 @15169 has 29 MA's), (Start: 7 @15172 has 8 MA's), (9, 15196), (16, 15250), (26, 15508), (28, 15532), (37, 15676), (42, 15799),

Gene: Jifall16_26 Start: 17526, Stop: 18248, Start Num: 6

Candidate Starts for Jifall16_26:

(5, 17400), (Start: 6 @17526 has 29 MA's), (Start: 10 @17565 has 5 MA's), (25, 17880), (27, 17925), (36, 18069), (37, 18081),

Gene: Kabluna_30 Start: 16649, Stop: 17314, Start Num: 6

Candidate Starts for Kabluna_30:

(Start: 6 @16649 has 29 MA's), (Start: 10 @16688 has 5 MA's), (25, 16946), (28, 17003), (37, 17147),

Gene: KidneyBean_27 Start: 17659, Stop: 18360, Start Num: 6

Candidate Starts for KidneyBean_27:

(5, 17533), (Start: 6 @17659 has 29 MA's), (Start: 10 @17698 has 5 MA's), (25, 17992), (27, 18037), (36, 18181), (37, 18193),

Gene: Kurt_27 Start: 17896, Stop: 18627, Start Num: 6

Candidate Starts for Kurt_27:

(5, 17770), (Start: 6 @17896 has 29 MA's), (Start: 10 @17935 has 5 MA's), (25, 18259), (27, 18304), (36, 18448), (37, 18460),

Gene: Lollipop1437_32 Start: 18538, Stop: 19224, Start Num: 7

Candidate Starts for Lollipop1437_32:

(1, 18214), (2, 18283), (5, 18412), (Start: 7 @18538 has 8 MA's), (Start: 10 @18577 has 5 MA's), (25, 18859), (37, 19060),

Gene: MacGully_35 Start: 18819, Stop: 19505, Start Num: 10

Candidate Starts for MacGully_35:

(Start: 10 @18819 has 5 MA's), (17, 18864), (21, 18900), (28, 19191), (34, 19269), (37, 19335), (38, 19371), (39, 19386), (43, 19476),

Gene: Marietta_29 Start: 15098, Stop: 15763, Start Num: 7

Candidate Starts for Marietta_29:

(Start: 6 @15095 has 29 MA's), (Start: 7 @15098 has 8 MA's), (9, 15122), (16, 15176), (23, 15359), (26, 15428), (28, 15452), (37, 15596), (42, 15719),

Gene: Maselop_31 Start: 18871, Stop: 19554, Start Num: 10

Candidate Starts for Maselop_31:

(1, 18487), (3, 18562), (4, 18568), (Start: 10 @18871 has 5 MA's), (12, 18883), (22, 19009), (37, 19387), (38, 19423), (39, 19438), (43, 19528),

Gene: MerCougar_28 Start: 17843, Stop: 18520, Start Num: 6

Candidate Starts for MerCougar_28:

(Start: 6 @17843 has 29 MA's), (Start: 10 @17882 has 5 MA's), (13, 17897), (14, 17900), (25, 18152), (27, 18197), (28, 18209), (36, 18341), (37, 18353),

Gene: NadineRae_27 Start: 14344, Stop: 15009, Start Num: 6

Candidate Starts for NadineRae_27:

(Start: 6 @14344 has 29 MA's), (Start: 7 @14347 has 8 MA's), (9, 14371), (16, 14425), (26, 14674), (28, 14698), (37, 14842), (42, 14965),

Gene: NatB6_27 Start: 16920, Stop: 17636, Start Num: 6

Candidate Starts for NatB6_27:

(5, 16794), (Start: 6 @16920 has 29 MA's), (Start: 10 @16959 has 5 MA's), (25, 17268), (27, 17313), (36, 17457), (37, 17469),

Gene: NosilaM_30 Start: 17528, Stop: 18211, Start Num: 6

Candidate Starts for NosilaM_30:

(Start: 6 @17528 has 29 MA's), (25, 17843), (28, 17900), (37, 18044),

Gene: NovumRegina_27 Start: 17251, Stop: 17967, Start Num: 6

Candidate Starts for NovumRegina_27:

(5, 17125), (Start: 6 @17251 has 29 MA's), (Start: 10 @17290 has 5 MA's), (25, 17599), (27, 17644), (36, 17788), (37, 17800),

Gene: Outis_28 Start: 17537, Stop: 18214, Start Num: 6

Candidate Starts for Outis_28:

(Start: 6 @17537 has 29 MA's), (Start: 10 @17576 has 5 MA's), (13, 17591), (14, 17594), (25, 17846), (27, 17891), (28, 17903), (37, 18047),

Gene: Patio_30 Start: 17774, Stop: 18460, Start Num: 7

Candidate Starts for Patio_30:

(1, 17450), (2, 17519), (5, 17648), (Start: 7 @17774 has 8 MA's), (Start: 10 @17813 has 5 MA's), (25, 18095), (37, 18296),

Gene: Phomeo_26 Start: 17546, Stop: 18262, Start Num: 6

Candidate Starts for Phomeo_26:

(5, 17420), (Start: 6 @17546 has 29 MA's), (Start: 10 @17585 has 5 MA's), (25, 17894), (27, 17939), (36, 18083), (37, 18095),

Gene: Pleakley_36 Start: 17575, Stop: 18303, Start Num: 6

Candidate Starts for Pleakley_36:

(5, 17449), (Start: 6 @17575 has 29 MA's), (15, 17635), (20, 17668), (25, 17935), (27, 17980), (28, 17992), (37, 18136),

Gene: Polyuyki_31 Start: 18863, Stop: 19546, Start Num: 10

Candidate Starts for Polyuyki_31:

(1, 18479), (3, 18554), (4, 18560), (Start: 10 @18863 has 5 MA's), (12, 18875), (22, 19001), (37, 19379), (38, 19415), (39, 19430), (43, 19520),

Gene: Skysand_29 Start: 17994, Stop: 18680, Start Num: 7

Candidate Starts for Skysand_29:

(1, 17670), (2, 17739), (5, 17868), (Start: 7 @17994 has 8 MA's), (Start: 10 @18033 has 5 MA's), (25, 18315), (37, 18516),

Gene: StarStruck_28 Start: 17537, Stop: 18214, Start Num: 6

Candidate Starts for StarStruck_28:

(Start: 6 @17537 has 29 MA's), (Start: 10 @17576 has 5 MA's), (13, 17591), (14, 17594), (25, 17846), (27, 17891), (28, 17903), (37, 18047),

Gene: Sukkupi_29 Start: 16649, Stop: 17320, Start Num: 7

Candidate Starts for Sukkupi_29:

(Start: 6 @16646 has 29 MA's), (Start: 7 @16649 has 8 MA's), (9, 16673), (Start: 10 @16688 has 5 MA's), (16, 16727), (26, 16985), (28, 17009), (37, 17153), (42, 17276),

Gene: SuperSulley_28 Start: 17716, Stop: 18399, Start Num: 6

Candidate Starts for SuperSulley_28:

(Start: 6 @17716 has 29 MA's), (Start: 10 @17755 has 5 MA's), (25, 18031), (28, 18088), (37, 18232),

Gene: Tracker_27 Start: 16674, Stop: 17390, Start Num: 6

Candidate Starts for Tracker_27:

(5, 16548), (Start: 6 @16674 has 29 MA's), (Start: 10 @16713 has 5 MA's), (25, 17022), (27, 17067), (36, 17211), (37, 17223),

Gene: Turuncu_31 Start: 18026, Stop: 18712, Start Num: 6

Candidate Starts for Turuncu_31:

(Start: 6 @18026 has 29 MA's), (Start: 10 @18065 has 5 MA's), (13, 18080), (14, 18083), (32, 18443), (37, 18545), (40, 18605),

Gene: Wheezy_27 Start: 16877, Stop: 17593, Start Num: 6

Candidate Starts for Wheezy_27:

(5, 16751), (Start: 6 @16877 has 29 MA's), (Start: 10 @16916 has 5 MA's), (25, 17225), (27, 17270), (36, 17414), (37, 17426),

Gene: WhoseManz_29 Start: 14706, Stop: 15374, Start Num: 6

Candidate Starts for WhoseManz_29:

(Start: 6 @14706 has 29 MA's), (Start: 7 @14709 has 8 MA's), (16, 14787), (26, 15039), (28, 15063), (37, 15207), (42, 15330),

Gene: Yndexa_29 Start: 16649, Stop: 17320, Start Num: 7

Candidate Starts for Yndexa_29:

(Start: 6 @16646 has 29 MA's), (Start: 7 @16649 has 8 MA's), (9, 16673), (Start: 10 @16688 has 5 MA's), (16, 16727), (26, 16985), (28, 17009), (37, 17153), (42, 17276),