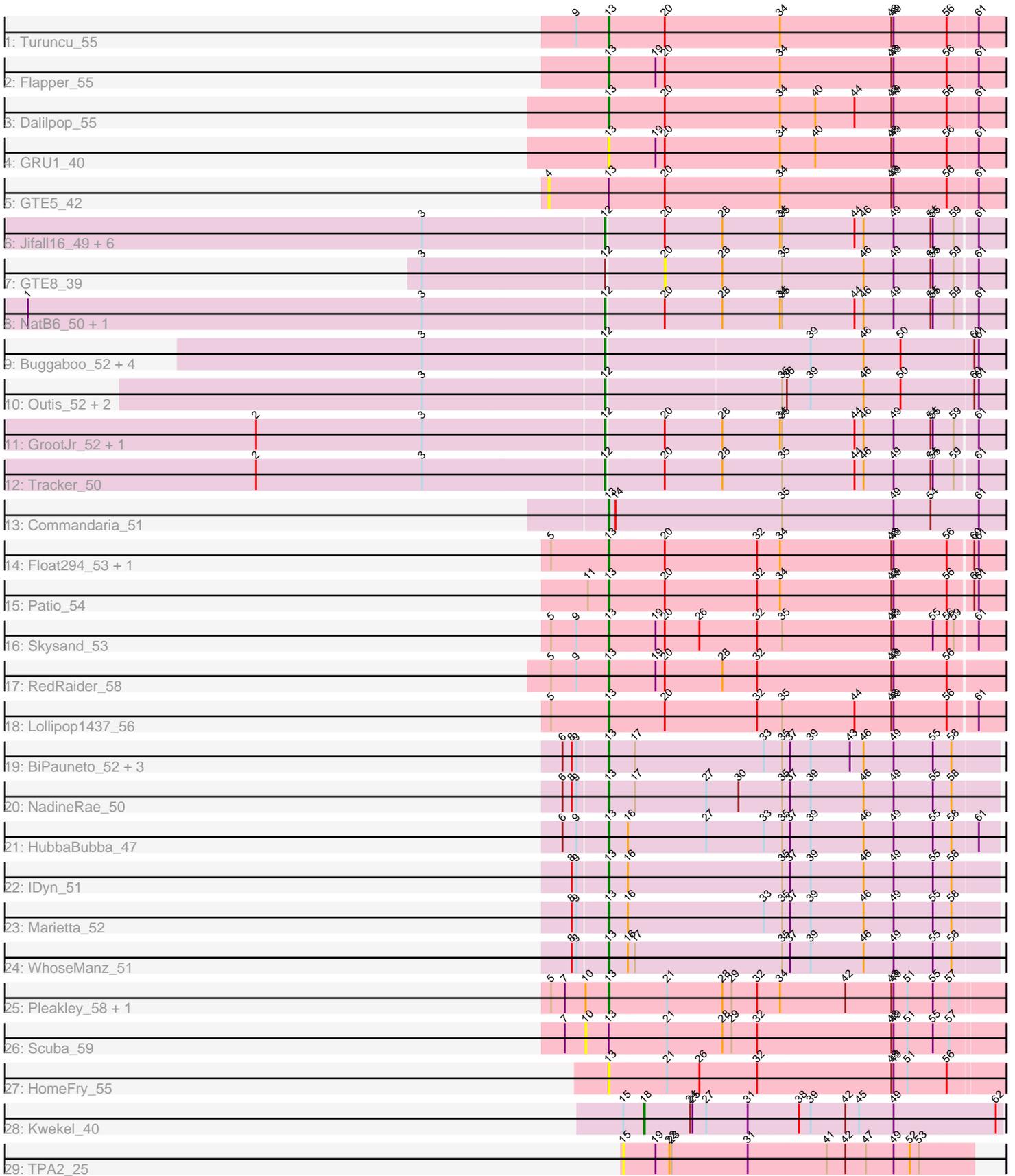


Pham 283914



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 283914 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283914 has 48 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Turuncu_55
- Track 2 : Flapper_55
- Track 3 : Dalilpop_55
- Track 4 : GRU1_40
- Track 5 : GTE5_42
- Track 6 : Jifall16_49, Emianna_50, Kurt_50, KidneyBean_50, Phomeo_49, Arti_50, Foxboro_51
- Track 7 : GTE8_39
- Track 8 : NatB6_50, Wheezy_50
- Track 9 : Buggaboo_52, Kabluna_54, SuperSulley_52, Bonum_54, NosilaM_54
- Track 10 : Outis_52, MerCougar_52, StarStruck_52
- Track 11 : GrootJr_52, NovumRegina_50
- Track 12 : Tracker_50
- Track 13 : Commandaria_51
- Track 14 : Float294_53, Ennea_57
- Track 15 : Patio_54
- Track 16 : Skysand_53
- Track 17 : RedRaider_58
- Track 18 : Lollipop1437_56
- Track 19 : BiPauneto_52, Pemberton_53, Yndexa_51, Sukkupi_51
- Track 20 : NadineRae_50
- Track 21 : HubbaBubba_47
- Track 22 : IDyn_51
- Track 23 : Marietta_52
- Track 24 : WhoseManz_51
- Track 25 : Pleakley_58, Fury_58
- Track 26 : Scuba_59
- Track 27 : HomeFry_55
- Track 28 : Kwekel_40
- Track 29 : TPA2_25

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

The start number called the most often in the published annotations is 12, it was called in 20 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arti_50, Bonum_54, Buggaboo_52, Emianna_50, Foxboro_51, GrootJr_52, Jifall16_49, Kabluna_54, KidneyBean_50, Kurt_50, MerCougar_52, NatB6_50, NosilaM_54, NovumRegina_50, Outis_52, Phomeo_49, StarStruck_52, SuperSulley_52, Tracker_50, Wheezy_50,

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

- GTE8_39,

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

- BiPauneto_52, Commandaria_51, Dalilpop_55, Ennea_57, Flapper_55, Float294_53, Fury_58, GRU1_40, GTE5_42, HomeFry_55, HubbaBubba_47, IDyn_51, Kwekel_40, Lollipop1437_56, Marietta_52, NadineRae_50, Patio_54, Pemberton_53, Pleakley_58, RedRaider_58, Scuba_59, Skysand_53, Sukkupi_51, TPA2_25, Turuncu_55, WhoseManz_51, Yndexa_51,

Summary by start number:

Start 4:

- 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: GTE5_42 (CR1),

Start 10:

- Found in 3 of 48 (6.2%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Scuba_59 (CR5),

Start 12:

- Found in 21 of 48 (43.8%) of genes in pham
- Manual Annotations of this start: 20 of 41
- Called 95.2% of time when present
- Phage (with cluster) where this start called: Arti_50 (CR2), Bonum_54 (CR2), Buggaboo_52 (CR2), Emianna_50 (CR2), Foxboro_51 (CR2), GrootJr_52 (CR2), Jifall16_49 (CR2), Kabluna_54 (CR2), KidneyBean_50 (CR2), Kurt_50 (CR2), MerCougar_52 (CR2), NatB6_50 (CR2), NosilaM_54 (CR2), NovumRegina_50 (CR2), Outis_52 (CR2), Phomeo_49 (CR2), StarStruck_52 (CR2), SuperSulley_52 (CR2), Tracker_50 (CR2), Wheezy_50 (CR2),

Start 13:

- Found in 25 of 48 (52.1%) of genes in pham
- Manual Annotations of this start: 20 of 41
- Called 92.0% of time when present
- Phage (with cluster) where this start called: BiPauneto_52 (CR4), Commandaria_51 (CR2), Dalilpop_55 (CR1), Ennea_57 (CR3), Flapper_55 (CR1), Float294_53 (CR3), Fury_58 (CR5), GRU1_40 (CR1), HomeFry_55 (CR5), HubbaBubba_47 (CR4), IDyn_51 (CR4), Lollipop1437_56 (CR3), Marietta_52 (CR4), NadineRae_50 (CR4), Patio_54 (CR3), Pemberton_53 (CR4), Pleakley_58 (CR5), RedRaider_58 (CR3),

Skysand_53 (CR3), Sukkupi_51 (CR4), Turuncu_55 (CR1), WhoseManz_51 (CR4), Yndexa_51 (CR4),

Start 15:

- Found in 2 of 48 (4.2%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: TPA2_25 (singleton),

Start 18:

- Found in 1 of 48 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kwekel_40 (DE3),

Start 20:

- Found in 24 of 48 (50.0%) of genes in pham
- No Manual Annotations of this start.
- Called 4.2% of time when present
- Phage (with cluster) where this start called: GTE8_39 (CR2),

Summary by clusters:

There are 7 clusters represented in this pham: CR2, CR3, singleton, CR1, CR4, CR5, DE3,

Info for manual annotations of cluster CR1:

- Start number 13 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 12 was manually annotated 20 times for cluster CR2.
- Start number 13 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 13 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 13 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 13 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster DE3:

- Start number 18 was manually annotated 1 time for cluster DE3.

Gene Information:

Gene: Arti_50 Start: 38680, Stop: 39186, Start Num: 12

Candidate Starts for Arti_50:

(3, 38449), (Start: 12 @38680 has 20 MA's), (20, 38752), (28, 38827), (34, 38902), (35, 38905), (44, 38998), (46, 39010), (49, 39049), (54, 39097), (55, 39100), (59, 39127), (61, 39154),

Gene: BiPauneto_52 Start: 38203, Stop: 38706, Start Num: 13

Candidate Starts for BiPauneto_52:

(6, 38149), (8, 38161), (9, 38167), (Start: 13 @38203 has 20 MA's), (17, 38236), (33, 38404), (35, 38428), (37, 38437), (39, 38464), (43, 38515), (46, 38533), (49, 38572), (55, 38623), (58, 38647),

Gene: Bonum_54 Start: 39333, Stop: 39842, Start Num: 12

Candidate Starts for Bonum_54:

(3, 39102), (Start: 12 @39333 has 20 MA's), (39, 39591), (46, 39660), (50, 39708), (60, 39801), (61, 39807),

Gene: Buggaboo_52 Start: 39812, Stop: 40321, Start Num: 12

Candidate Starts for Buggaboo_52:

(3, 39581), (Start: 12 @39812 has 20 MA's), (39, 40070), (46, 40139), (50, 40187), (60, 40280), (61, 40286),

Gene: Commandaria_51 Start: 39801, Stop: 40316, Start Num: 13

Candidate Starts for Commandaria_51:

(Start: 13 @39801 has 20 MA's), (14, 39810), (35, 40026), (49, 40170), (54, 40218), (61, 40281),

Gene: Dalilpop_55 Start: 40964, Stop: 41473, Start Num: 13

Candidate Starts for Dalilpop_55:

(Start: 13 @40964 has 20 MA's), (20, 41036), (34, 41186), (40, 41231), (44, 41282), (48, 41330), (49, 41333), (56, 41402), (61, 41441),

Gene: Emianna_50 Start: 39672, Stop: 40178, Start Num: 12

Candidate Starts for Emianna_50:

(3, 39441), (Start: 12 @39672 has 20 MA's), (20, 39744), (28, 39819), (34, 39894), (35, 39897), (44, 39990), (46, 40002), (49, 40041), (54, 40089), (55, 40092), (59, 40119), (61, 40146),

Gene: Ennea_57 Start: 40686, Stop: 41192, Start Num: 13

Candidate Starts for Ennea_57:

(5, 40611), (Start: 13 @40686 has 20 MA's), (20, 40758), (32, 40878), (34, 40908), (48, 41052), (49, 41055), (56, 41124), (60, 41154), (61, 41160),

Gene: Flapper_55 Start: 40395, Stop: 40904, Start Num: 13

Candidate Starts for Flapper_55:

(Start: 13 @40395 has 20 MA's), (19, 40455), (20, 40467), (34, 40617), (48, 40761), (49, 40764), (56, 40833), (61, 40872),

Gene: Float294_53 Start: 40128, Stop: 40634, Start Num: 13

Candidate Starts for Float294_53:

(5, 40053), (Start: 13 @40128 has 20 MA's), (20, 40200), (32, 40320), (34, 40350), (48, 40494), (49, 40497), (56, 40566), (60, 40596), (61, 40602),

Gene: Foxboro_51 Start: 40178, Stop: 40684, Start Num: 12

Candidate Starts for Foxboro_51:

(3, 39947), (Start: 12 @40178 has 20 MA's), (20, 40250), (28, 40325), (34, 40400), (35, 40403), (44, 40496), (46, 40508), (49, 40547), (54, 40595), (55, 40598), (59, 40625), (61, 40652),

Gene: Fury_58 Start: 38850, Stop: 39359, Start Num: 13

Candidate Starts for Fury_58:

(5, 38775), (7, 38793), (10, 38820), (Start: 13 @38850 has 20 MA's), (21, 38925), (28, 38997), (29, 39009), (32, 39042), (34, 39072), (42, 39156), (48, 39216), (49, 39219), (51, 39237), (55, 39270), (57, 39291),

Gene: GRU1_40 Start: 31942, Stop: 32451, Start Num: 13

Candidate Starts for GRU1_40:

(Start: 13 @31942 has 20 MA's), (19, 32002), (20, 32014), (34, 32164), (40, 32209), (48, 32308), (49, 32311), (56, 32380), (61, 32419),

Gene: GTE5_42 Start: 33174, Stop: 33761, Start Num: 4

Candidate Starts for GTE5_42:

(4, 33174), (Start: 13 @33252 has 20 MA's), (20, 33324), (34, 33474), (48, 33618), (49, 33621), (56, 33690), (61, 33729),

Gene: GTE8_39 Start: 33002, Stop: 33436, Start Num: 20

Candidate Starts for GTE8_39:

(3, 32699), (Start: 12 @32930 has 20 MA's), (20, 33002), (28, 33077), (35, 33155), (46, 33260), (49, 33299), (54, 33347), (55, 33350), (59, 33377), (61, 33404),

Gene: GrootJr_52 Start: 39054, Stop: 39560, Start Num: 12

Candidate Starts for GrootJr_52:

(2, 38607), (3, 38823), (Start: 12 @39054 has 20 MA's), (20, 39126), (28, 39201), (34, 39276), (35, 39279), (44, 39372), (46, 39384), (49, 39423), (54, 39471), (55, 39474), (59, 39501), (61, 39528),

Gene: HomeFry_55 Start: 37501, Stop: 38010, Start Num: 13

Candidate Starts for HomeFry_55:

(Start: 13 @37501 has 20 MA's), (21, 37576), (26, 37618), (32, 37693), (48, 37867), (49, 37870), (51, 37888), (56, 37939),

Gene: HubbaBubba_47 Start: 35218, Stop: 35721, Start Num: 13

Candidate Starts for HubbaBubba_47:

(6, 35164), (9, 35182), (Start: 13 @35218 has 20 MA's), (16, 35242), (27, 35344), (33, 35419), (35, 35443), (37, 35452), (39, 35479), (46, 35548), (49, 35587), (55, 35638), (58, 35662), (61, 35695),

Gene: IDyn_51 Start: 36647, Stop: 37150, Start Num: 13

Candidate Starts for IDyn_51:

(8, 36605), (9, 36611), (Start: 13 @36647 has 20 MA's), (16, 36671), (35, 36872), (37, 36881), (39, 36908), (46, 36977), (49, 37016), (55, 37067), (58, 37091),

Gene: Jifall16_49 Start: 39326, Stop: 39832, Start Num: 12

Candidate Starts for Jifall16_49:

(3, 39095), (Start: 12 @39326 has 20 MA's), (20, 39398), (28, 39473), (34, 39548), (35, 39551), (44, 39644), (46, 39656), (49, 39695), (54, 39743), (55, 39746), (59, 39773), (61, 39800),

Gene: Kabluna_54 Start: 38748, Stop: 39257, Start Num: 12

Candidate Starts for Kabluna_54:

(3, 38517), (Start: 12 @38748 has 20 MA's), (39, 39006), (46, 39075), (50, 39123), (60, 39216), (61, 39222),

Gene: KidneyBean_50 Start: 39450, Stop: 39956, Start Num: 12

Candidate Starts for KidneyBean_50:

(3, 39219), (Start: 12 @39450 has 20 MA's), (20, 39522), (28, 39597), (34, 39672), (35, 39675), (44, 39768), (46, 39780), (49, 39819), (54, 39867), (55, 39870), (59, 39897), (61, 39924),

Gene: Kurt_50 Start: 39687, Stop: 40193, Start Num: 12

Candidate Starts for Kurt_50:

(3, 39456), (Start: 12 @39687 has 20 MA's), (20, 39759), (28, 39834), (34, 39909), (35, 39912), (44, 40005), (46, 40017), (49, 40056), (54, 40104), (55, 40107), (59, 40134), (61, 40161),

Gene: Kwekel_40 Start: 36036, Stop: 36500, Start Num: 18

Candidate Starts for Kwekel_40:

(15, 36009), (Start: 18 @36036 has 1 MA's), (24, 36096), (25, 36099), (27, 36117), (31, 36171), (38, 36237), (39, 36252), (42, 36297), (45, 36315), (49, 36360), (62, 36492),

Gene: Lollipop1437_56 Start: 40674, Stop: 41180, Start Num: 13

Candidate Starts for Lollipop1437_56:

(5, 40599), (Start: 13 @40674 has 20 MA's), (20, 40746), (32, 40866), (35, 40899), (44, 40992), (48, 41040), (49, 41043), (56, 41112), (61, 41148),

Gene: Marietta_52 Start: 36541, Stop: 37044, Start Num: 13

Candidate Starts for Marietta_52:

(8, 36499), (9, 36505), (Start: 13 @36541 has 20 MA's), (16, 36565), (33, 36742), (35, 36766), (37, 36775), (39, 36802), (46, 36871), (49, 36910), (55, 36961), (58, 36985),

Gene: MerCougar_52 Start: 39950, Stop: 40459, Start Num: 12

Candidate Starts for MerCougar_52:

(3, 39719), (Start: 12 @39950 has 20 MA's), (35, 40172), (36, 40178), (39, 40208), (46, 40277), (50, 40325), (60, 40418), (61, 40424),

Gene: NadineRae_50 Start: 35788, Stop: 36291, Start Num: 13

Candidate Starts for NadineRae_50:

(6, 35734), (8, 35746), (9, 35752), (Start: 13 @35788 has 20 MA's), (17, 35821), (27, 35914), (30, 35956), (35, 36013), (37, 36022), (39, 36049), (46, 36118), (49, 36157), (55, 36208), (58, 36232),

Gene: NatB6_50 Start: 38744, Stop: 39250, Start Num: 12

Candidate Starts for NatB6_50:

(1, 38000), (3, 38513), (Start: 12 @38744 has 20 MA's), (20, 38816), (28, 38891), (34, 38966), (35, 38969), (44, 39062), (46, 39074), (49, 39113), (54, 39161), (55, 39164), (59, 39191), (61, 39218),

Gene: NosilaM_54 Start: 39645, Stop: 40154, Start Num: 12

Candidate Starts for NosilaM_54:

(3, 39414), (Start: 12 @39645 has 20 MA's), (39, 39903), (46, 39972), (50, 40020), (60, 40113), (61, 40119),

Gene: NovumRegina_50 Start: 39053, Stop: 39559, Start Num: 12

Candidate Starts for NovumRegina_50:

(2, 38606), (3, 38822), (Start: 12 @39053 has 20 MA's), (20, 39125), (28, 39200), (34, 39275), (35, 39278), (44, 39371), (46, 39383), (49, 39422), (54, 39470), (55, 39473), (59, 39500), (61, 39527),

Gene: Outis_52 Start: 39644, Stop: 40153, Start Num: 12

Candidate Starts for Outis_52:

(3, 39413), (Start: 12 @39644 has 20 MA's), (35, 39866), (36, 39872), (39, 39902), (46, 39971), (50, 40019), (60, 40112), (61, 40118),

Gene: Patio_54 Start: 39910, Stop: 40416, Start Num: 13

Candidate Starts for Patio_54:

(11, 39883), (Start: 13 @39910 has 20 MA's), (20, 39982), (32, 40102), (34, 40132), (48, 40276), (49, 40279), (56, 40348), (60, 40378), (61, 40384),

Gene: Pemberton_53 Start: 36520, Stop: 37023, Start Num: 13
Candidate Starts for Pemberton_53:

(6, 36466), (8, 36478), (9, 36484), (Start: 13 @36520 has 20 MA's), (17, 36553), (33, 36721), (35, 36745), (37, 36754), (39, 36781), (43, 36832), (46, 36850), (49, 36889), (55, 36940), (58, 36964),

Gene: Phomeo_49 Start: 39322, Stop: 39828, Start Num: 12
Candidate Starts for Phomeo_49:

(3, 39091), (Start: 12 @39322 has 20 MA's), (20, 39394), (28, 39469), (34, 39544), (35, 39547), (44, 39640), (46, 39652), (49, 39691), (54, 39739), (55, 39742), (59, 39769), (61, 39796),

Gene: Pleakley_58 Start: 38851, Stop: 39360, Start Num: 13
Candidate Starts for Pleakley_58:

(5, 38776), (7, 38794), (10, 38821), (Start: 13 @38851 has 20 MA's), (21, 38926), (28, 38998), (29, 39010), (32, 39043), (34, 39073), (42, 39157), (48, 39217), (49, 39220), (51, 39238), (55, 39271), (57, 39292),

Gene: RedRaider_58 Start: 41932, Stop: 42441, Start Num: 13
Candidate Starts for RedRaider_58:

(5, 41857), (9, 41890), (Start: 13 @41932 has 20 MA's), (19, 41992), (20, 42004), (28, 42079), (32, 42124), (48, 42298), (49, 42301), (56, 42370),

Gene: Scuba_59 Start: 38895, Stop: 39434, Start Num: 10
Candidate Starts for Scuba_59:

(7, 38868), (10, 38895), (Start: 13 @38925 has 20 MA's), (21, 39000), (28, 39072), (29, 39084), (32, 39117), (48, 39291), (49, 39294), (51, 39312), (55, 39345), (57, 39366),

Gene: Skysand_53 Start: 40130, Stop: 40636, Start Num: 13
Candidate Starts for Skysand_53:

(5, 40055), (9, 40088), (Start: 13 @40130 has 20 MA's), (19, 40190), (20, 40202), (26, 40247), (32, 40322), (35, 40355), (48, 40496), (49, 40499), (55, 40550), (56, 40568), (59, 40577), (61, 40604),

Gene: StarStruck_52 Start: 39644, Stop: 40153, Start Num: 12
Candidate Starts for StarStruck_52:

(3, 39413), (Start: 12 @39644 has 20 MA's), (35, 39866), (36, 39872), (39, 39902), (46, 39971), (50, 40019), (60, 40112), (61, 40118),

Gene: Sukkupi_51 Start: 38094, Stop: 38597, Start Num: 13
Candidate Starts for Sukkupi_51:

(6, 38040), (8, 38052), (9, 38058), (Start: 13 @38094 has 20 MA's), (17, 38127), (33, 38295), (35, 38319), (37, 38328), (39, 38355), (43, 38406), (46, 38424), (49, 38463), (55, 38514), (58, 38538),

Gene: SuperSulley_52 Start: 39812, Stop: 40321, Start Num: 12
Candidate Starts for SuperSulley_52:

(3, 39581), (Start: 12 @39812 has 20 MA's), (39, 40070), (46, 40139), (50, 40187), (60, 40280), (61, 40286),

Gene: TPA2_25 Start: 16114, Stop: 16566, Start Num: 15
Candidate Starts for TPA2_25:

(15, 16114), (19, 16156), (22, 16174), (23, 16177), (31, 16276), (41, 16378), (42, 16402), (47, 16429), (49, 16465), (52, 16486), (53, 16498),

Gene: Tracker_50 Start: 38471, Stop: 38977, Start Num: 12

Candidate Starts for Tracker_50:

(2, 38024), (3, 38240), (Start: 12 @38471 has 20 MA's), (20, 38543), (28, 38618), (35, 38696), (44, 38789), (46, 38801), (49, 38840), (54, 38888), (55, 38891), (59, 38918), (61, 38945),

Gene: Turuncu_55 Start: 40057, Stop: 40566, Start Num: 13

Candidate Starts for Turuncu_55:

(9, 40015), (Start: 13 @40057 has 20 MA's), (20, 40129), (34, 40279), (48, 40423), (49, 40426), (56, 40495), (61, 40534),

Gene: Wheezy_50 Start: 38676, Stop: 39182, Start Num: 12

Candidate Starts for Wheezy_50:

(1, 37932), (3, 38445), (Start: 12 @38676 has 20 MA's), (20, 38748), (28, 38823), (34, 38898), (35, 38901), (44, 38994), (46, 39006), (49, 39045), (54, 39093), (55, 39096), (59, 39123), (61, 39150),

Gene: WhoseManz_51 Start: 36154, Stop: 36657, Start Num: 13

Candidate Starts for WhoseManz_51:

(8, 36112), (9, 36118), (Start: 13 @36154 has 20 MA's), (16, 36178), (17, 36187), (35, 36379), (37, 36388), (39, 36415), (46, 36484), (49, 36523), (55, 36574), (58, 36598),

Gene: Yndexa_51 Start: 38094, Stop: 38597, Start Num: 13

Candidate Starts for Yndexa_51:

(6, 38040), (8, 38052), (9, 38058), (Start: 13 @38094 has 20 MA's), (17, 38127), (33, 38295), (35, 38319), (37, 38328), (39, 38355), (43, 38406), (46, 38424), (49, 38463), (55, 38514), (58, 38538),