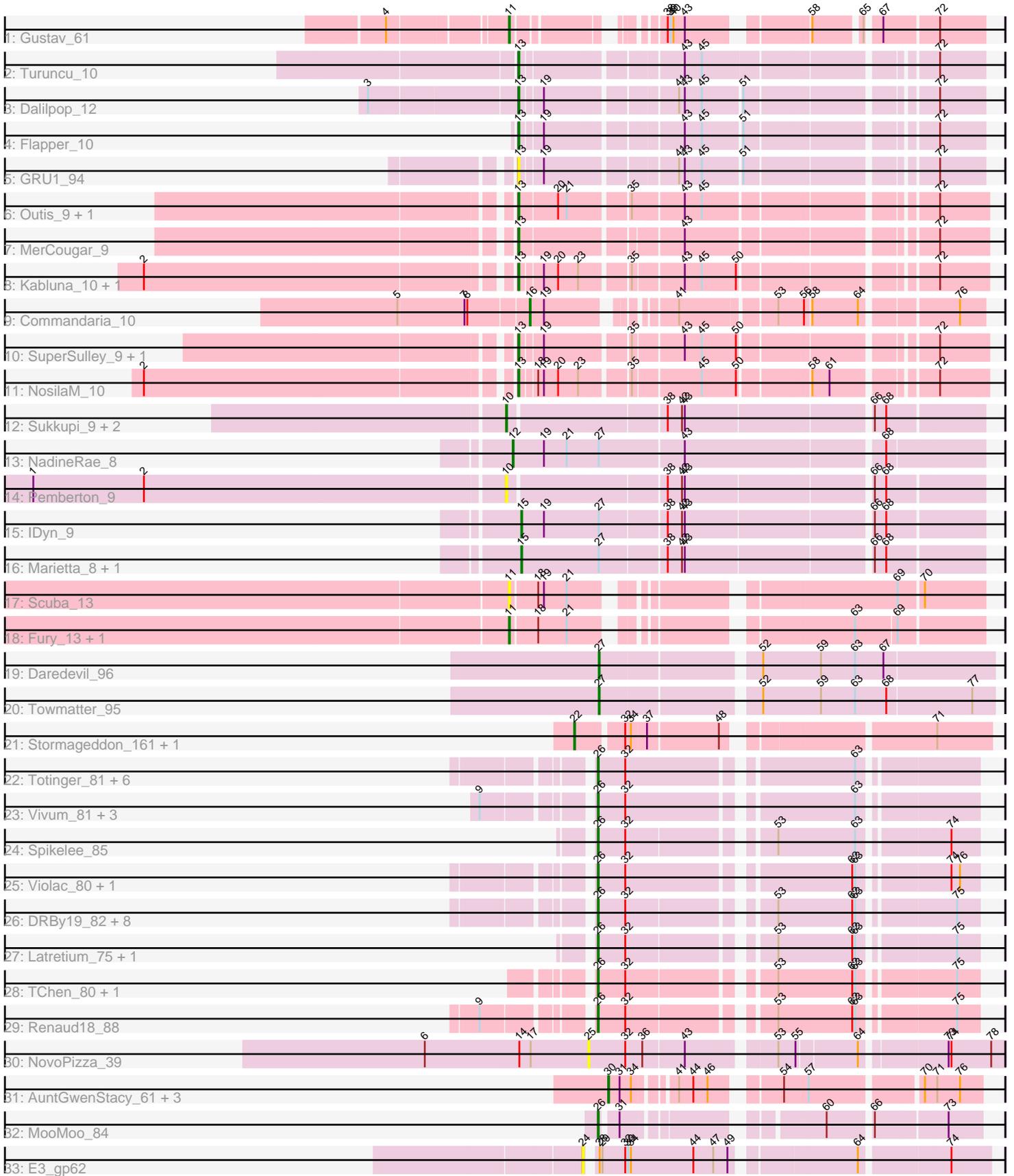


Pham 283802



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 283802 Report

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

Pham number 283802 has 64 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Gustav_61
- Track 2 : Turuncu_10
- Track 3 : Dalilpop_12
- Track 4 : Flapper_10
- Track 5 : GRU1_94
- Track 6 : Outis_9, StarStruck_9
- Track 7 : MerCougar_9
- Track 8 : Kabluna_10, Bonum_10
- Track 9 : Commandaria_10
- Track 10 : SuperSulley_9, Buggaboo_9
- Track 11 : NosilaM_10
- Track 12 : Sukkupi_9, BiPauneto_9, Yndexa_9
- Track 13 : NadineRae_8
- Track 14 : Pemberton_9
- Track 15 : IDyn_9
- Track 16 : Marietta_8, WhoseManz_8
- Track 17 : Scuba_13
- Track 18 : Fury_13, Pleakley_13
- Track 19 : Daredevil_96
- Track 20 : Towmatter_95
- Track 21 : Stormageddon_161, RedWattleHog_160
- Track 22 : Totinger_81, Peridot_83, LilMoolah_77, Starcevich_79, Nivrat_75, Fastidio_79, LittleShirley_85
- Track 23 : Vivum_81, EmiMonkey_79, GigiOuiOui_73, PhlipPhlop_80
- Track 24 : Spikelee_85
- Track 25 : Violac_80, Che8_82
- Track 26 : DRBy19_82, Jarcob_78, OlympiaSaint_78, Clifton_71, IbOuu_76, James_79, ShroomBoi_79, Philus_81, Bipolar_81
- Track 27 : Latretium_75, OwlsT2W_80
- Track 28 : TChen_80, LunaStella_78
- Track 29 : Renaud18_88
- Track 30 : NovoPizza_39
- Track 31 : AuntGwenStacy_61, Faiyaz_61, Typha_60, Hilltopfarm_60
- Track 32 : MooMoo_84
- Track 33 : E3_gp62

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

The start number called the most often in the published annotations is 26, it was called in 25 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bipolar_81, Che8_82, Clifton_71, DRBy19_82, EmiMonkey_79, Fastidio_79, GigiOuiOui_73, IbOuu_76, James_79, Jarcob_78, Latretium_75, LilMoolah_77, LittleShirley_85, LunaStella_78, MooMoo_84, Nivrat_75, OlympiaSaint_78, OwlsT2W_80, Peridot_83, Philus_81, PhlipPhlop_80, Renaud18_88, ShroomBoi_79, Spikelee_85, Starcevich_79, TChen_80, Totinger_81, Violac_80, Vivum_81,

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

-

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

- AuntGwenStacy_61, BiPauneto_9, Bonum_10, Buggaboo_9, Commandaria_10, Dalilpop_12, Daredevil_96, E3_gp62, Faiyaz_61, Flapper_10, Fury_13, GRU1_94, Gustav_61, Hilltopfarm_60, IDyn_9, Kabluna_10, Marietta_8, MerCougar_9, NadineRae_8, NosilaM_10, NovoPizza_39, Outis_9, Pemberton_9, Pleakley_13, RedWattleHog_160, Scuba_13, StarStruck_9, Stormageddon_161, Sukkupi_9, SuperSulley_9, Towmatter_95, Turuncu_10, Typha_60, WhoseManz_8, Yndexa_9,

Summary by start number:

Start 10:

- Found in 4 of 64 (6.2%) of genes in pham
- Manual Annotations of this start: 3 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BiPauneto_9 (CR4), Pemberton_9 (CR4), Sukkupi_9 (CR4), Yndexa_9 (CR4),

Start 11:

- Found in 4 of 64 (6.2%) of genes in pham
- Manual Annotations of this start: 3 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fury_13 (CR5), Gustav_61 (CD), Pleakley_13 (CR5), Scuba_13 (CR5),

Start 12:

- Found in 1 of 64 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NadineRae_8 (CR4),

Start 13:

- Found in 12 of 64 (18.8%) of genes in pham
- Manual Annotations of this start: 11 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bonum_10 (CR2), Buggaboo_9 (CR2), Dalilpop_12 (CR1), Flapper_10 (CR1), GRU1_94 (CR1), Kabluna_10 (CR2), MerCougar_9 (CR2), NosilaM_10 (CR2), Outis_9 (CR2), StarStruck_9 (CR2),

SuperSulley_9 (CR2), Turuncu_10 (CR1),

Start 15:

- Found in 3 of 64 (4.7%) of genes in pham
- Manual Annotations of this start: 3 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: IDyn_9 (CR4), Marietta_8 (CR4), WhoseManz_8 (CR4),

Start 16:

- Found in 1 of 64 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Commandaria_10 (CR2),

Start 22:

- Found in 2 of 64 (3.1%) of genes in pham
- Manual Annotations of this start: 2 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog_160 (DX), Stormageddon_161 (DX),

Start 24:

- Found in 1 of 64 (1.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3_gp62 (singleton),

Start 25:

- Found in 1 of 64 (1.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NovoPizza_39 (Q),

Start 26:

- Found in 29 of 64 (45.3%) of genes in pham
- Manual Annotations of this start: 25 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bipolar_81 (F1), Che8_82 (F1), Clifton_71 (F1), DRBy19_82 (F1), EmiMonkey_79 (F1), Fastidio_79 (F1), GigiOuiOui_73 (F1), IbOuu_76 (F1), James_79 (F1), Jarcob_78 (F1), Latretium_75 (F1), LilMoolah_77 (F1), LittleShirley_85 (F1), LunaStella_78 (F4), MooMoo_84 (singleton), Nivrat_75 (F1), OlympiaSaint_78 (F1), OwlsT2W_80 (F1), Peridot_83 (F1), Philus_81 (F1), PhlipPhlop_80 (F1), Renaud18_88 (F4), ShroomBoi_79 (F1), Spikelee_85 (F1), Starcevich_79 (F1), TChen_80 (F4), Totinger_81 (F1), Violac_80 (F1), Vivum_81 (F1),

Start 27:

- Found in 6 of 64 (9.4%) of genes in pham
- Manual Annotations of this start: 2 of 54
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Daredevil_96 (DL), Towmatter_95 (DL),

Start 30:

- Found in 4 of 64 (6.2%) of genes in pham
- Manual Annotations of this start: 3 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy_61 (Y), Faiyaz_61 (Y), Hilltopfarm_60 (Y), Typha_60 (Y),

Summary by clusters:

There are 12 clusters represented in this pham: CR2, F1, DL, CR1, F4, CR4, CR5, singleton, CD, Q, DX, Y,

Info for manual annotations of cluster CD:

- Start number 11 was manually annotated 1 time for cluster CD.

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 13 was manually annotated 8 times for cluster CR2.
- Start number 16 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR4:

- Start number 10 was manually annotated 3 times for cluster CR4.
- Start number 12 was manually annotated 1 time for cluster CR4.
- Start number 15 was manually annotated 3 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 11 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster DL:

- Start number 27 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster DX:

- Start number 22 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster F1:

- Start number 26 was manually annotated 21 times for cluster F1.

Info for manual annotations of cluster F4:

- Start number 26 was manually annotated 3 times for cluster F4.

Info for manual annotations of cluster Y:

- Start number 30 was manually annotated 3 times for cluster Y.

Gene Information:

Gene: AuntGwenStacy_61 Start: 44340, Stop: 44672, Start Num: 30

Candidate Starts for AuntGwenStacy_61:

(Start: 30 @44340 has 3 MA's), (31, 44352), (34, 44364), (41, 44397), (44, 44412), (46, 44427), (54, 44484), (57, 44508), (70, 44613), (71, 44625), (76, 44649),

Gene: BiPauneto_9 Start: 4386, Stop: 4853, Start Num: 10

Candidate Starts for BiPauneto_9:

(Start: 10 @4386 has 3 MA's), (38, 4542), (42, 4557), (43, 4560), (66, 4743), (68, 4755),

Gene: Bipolar_81 Start: 49898, Stop: 50251, Start Num: 26

Candidate Starts for Bipolar_81:

(Start: 26 @49898 has 25 MA's), (32, 49925), (53, 50057), (62, 50135), (63, 50138), (75, 50228),

Gene: Bonum_10 Start: 5796, Stop: 6227, Start Num: 13

Candidate Starts for Bonum_10:

(2, 5427), (Start: 13 @5796 has 11 MA's), (19, 5817), (20, 5832), (23, 5853), (35, 5898), (43, 5946), (45, 5964), (50, 6000), (72, 6177),

Gene: Buggaboo_9 Start: 5315, Stop: 5746, Start Num: 13

Candidate Starts for Buggaboo_9:

(Start: 13 @5315 has 11 MA's), (19, 5336), (35, 5417), (43, 5465), (45, 5483), (50, 5519), (72, 5696),

Gene: Che8_82 Start: 48631, Stop: 48987, Start Num: 26

Candidate Starts for Che8_82:

(Start: 26 @48631 has 25 MA's), (32, 48658), (62, 48871), (63, 48874), (74, 48958), (76, 48967),

Gene: Clifton_71 Start: 46466, Stop: 46819, Start Num: 26

Candidate Starts for Clifton_71:

(Start: 26 @46466 has 25 MA's), (32, 46493), (53, 46625), (62, 46703), (63, 46706), (75, 46796),

Gene: Commandaria_10 Start: 5673, Stop: 6080, Start Num: 16

Candidate Starts for Commandaria_10:

(5, 5541), (7, 5610), (8, 5613), (Start: 16 @5673 has 1 MA's), (19, 5688), (41, 5793), (53, 5886), (56, 5910), (58, 5916), (64, 5964), (76, 6054),

Gene: DRBy19_82 Start: 50195, Stop: 50548, Start Num: 26

Candidate Starts for DRBy19_82:

(Start: 26 @50195 has 25 MA's), (32, 50222), (53, 50354), (62, 50432), (63, 50435), (75, 50525),

Gene: Dalilpop_12 Start: 6793, Stop: 7221, Start Num: 13

Candidate Starts for Dalilpop_12:

(3, 6643), (Start: 13 @6793 has 11 MA's), (19, 6814), (41, 6937), (43, 6943), (45, 6961), (51, 7000), (72, 7174),

Gene: Daredevil_96 Start: 64552, Stop: 64944, Start Num: 27

Candidate Starts for Daredevil_96:

(Start: 27 @64552 has 2 MA's), (52, 64705), (59, 64765), (63, 64801), (67, 64831),

Gene: E3_gp62 Start: 24510, Stop: 24896, Start Num: 24

Candidate Starts for E3_gp62:

(24, 24510), (28, 24516), (29, 24519), (32, 24543), (33, 24546), (34, 24549), (44, 24615), (47, 24636), (49, 24651), (64, 24768), (74, 24855),

Gene: EmiMonkey_79 Start: 52180, Stop: 52536, Start Num: 26

Candidate Starts for EmiMonkey_79:

(9, 52084), (Start: 26 @52180 has 25 MA's), (32, 52207), (63, 52423),

Gene: Faiyaz_61 Start: 44330, Stop: 44662, Start Num: 30

Candidate Starts for Faiyaz_61:

(Start: 30 @44330 has 3 MA's), (31, 44342), (34, 44354), (41, 44387), (44, 44402), (46, 44417), (54, 44474), (57, 44498), (70, 44603), (71, 44615), (76, 44639),

Gene: Fastidio_79 Start: 45442, Stop: 45798, Start Num: 26

Candidate Starts for Fastidio_79:

(Start: 26 @45442 has 25 MA's), (32, 45469), (63, 45685),

Gene: Flapper_10 Start: 5630, Stop: 6058, Start Num: 13

Candidate Starts for Flapper_10:

(Start: 13 @5630 has 11 MA's), (19, 5651), (43, 5780), (45, 5798), (51, 5837), (72, 6011),

Gene: Fury_13 Start: 5917, Stop: 6342, Start Num: 11

Candidate Starts for Fury_13:

(Start: 11 @5917 has 3 MA's), (18, 5944), (21, 5974), (63, 6214), (69, 6256),

Gene: GRU1_94 Start: 64725, Stop: 65153, Start Num: 13

Candidate Starts for GRU1_94:

(Start: 13 @64725 has 11 MA's), (19, 64746), (41, 64869), (43, 64875), (45, 64893), (51, 64932), (72, 65106),

Gene: GigiOuiOui_73 Start: 47038, Stop: 47394, Start Num: 26

Candidate Starts for GigiOuiOui_73:

(9, 46942), (Start: 26 @47038 has 25 MA's), (32, 47065), (63, 47281),

Gene: Gustav_61 Start: 41194, Stop: 40802, Start Num: 11

Candidate Starts for Gustav_61:

(4, 41308), (Start: 11 @41194 has 3 MA's), (38, 41083), (39, 41080), (40, 41077), (43, 41065), (58, 40960), (65, 40915), (67, 40903), (72, 40849),

Gene: Hilltopfarm_60 Start: 44032, Stop: 44364, Start Num: 30

Candidate Starts for Hilltopfarm_60:

(Start: 30 @44032 has 3 MA's), (31, 44044), (34, 44056), (41, 44089), (44, 44104), (46, 44119), (54, 44176), (57, 44200), (70, 44305), (71, 44317), (76, 44341),

Gene: IDyn_9 Start: 4709, Stop: 5167, Start Num: 15

Candidate Starts for IDyn_9:

(Start: 15 @4709 has 3 MA's), (19, 4733), (Start: 27 @4790 has 2 MA's), (38, 4856), (42, 4871), (43, 4874), (66, 5057), (68, 5069),

Gene: lbOuu_76 Start: 46272, Stop: 46625, Start Num: 26

Candidate Starts for lbOuu_76:

(Start: 26 @46272 has 25 MA's), (32, 46299), (53, 46431), (62, 46509), (63, 46512), (75, 46602),

Gene: James_79 Start: 49530, Stop: 49883, Start Num: 26

Candidate Starts for James_79:

(Start: 26 @49530 has 25 MA's), (32, 49557), (53, 49689), (62, 49767), (63, 49770), (75, 49860),

Gene: Jacob_78 Start: 49127, Stop: 49480, Start Num: 26

Candidate Starts for Jacob_78:

(Start: 26 @49127 has 25 MA's), (32, 49154), (53, 49286), (62, 49364), (63, 49367), (75, 49457),

Gene: Kabluna_10 Start: 5187, Stop: 5618, Start Num: 13

Candidate Starts for Kabluna_10:

(2, 4818), (Start: 13 @5187 has 11 MA's), (19, 5208), (20, 5223), (23, 5244), (35, 5289), (43, 5337), (45, 5355), (50, 5391), (72, 5568),

Gene: Latretium_75 Start: 45992, Stop: 46345, Start Num: 26

Candidate Starts for Latretium_75:

(Start: 26 @45992 has 25 MA's), (32, 46019), (53, 46151), (62, 46229), (63, 46232), (75, 46322),

Gene: LilMoolah_77 Start: 48185, Stop: 48448, Start Num: 26

Candidate Starts for LilMoolah_77:

(Start: 26 @48185 has 25 MA's), (32, 48212), (63, 48428),

Gene: LittleShirley_85 Start: 49115, Stop: 49471, Start Num: 26

Candidate Starts for LittleShirley_85:

(Start: 26 @49115 has 25 MA's), (32, 49142), (63, 49358),

Gene: LunaStella_78 Start: 47826, Stop: 48179, Start Num: 26

Candidate Starts for LunaStella_78:

(Start: 26 @47826 has 25 MA's), (32, 47853), (53, 47985), (62, 48063), (63, 48066), (75, 48156),

Gene: Marietta_8 Start: 4121, Stop: 4579, Start Num: 15

Candidate Starts for Marietta_8:

(Start: 15 @4121 has 3 MA's), (Start: 27 @4202 has 2 MA's), (38, 4268), (42, 4283), (43, 4286), (66, 4469), (68, 4481),

Gene: MerCougar_9 Start: 5538, Stop: 5972, Start Num: 13

Candidate Starts for MerCougar_9:

(Start: 13 @5538 has 11 MA's), (43, 5691), (72, 5922),

Gene: MooMoo_84 Start: 49010, Stop: 49342, Start Num: 26

Candidate Starts for MooMoo_84:

(Start: 26 @49010 has 25 MA's), (31, 49025), (60, 49193), (66, 49235), (73, 49307),

Gene: NadineRae_8 Start: 3822, Stop: 4295, Start Num: 12

Candidate Starts for NadineRae_8:

(Start: 12 @3822 has 1 MA's), (19, 3855), (21, 3879), (Start: 27 @3912 has 2 MA's), (43, 3999), (68, 4197),

Gene: Nivrat_75 Start: 48058, Stop: 48321, Start Num: 26

Candidate Starts for Nivrat_75:

(Start: 26 @48058 has 25 MA's), (32, 48085), (63, 48301),

Gene: NosilaM_10 Start: 6075, Stop: 6506, Start Num: 13

Candidate Starts for NosilaM_10:

(2, 5706), (Start: 13 @6075 has 11 MA's), (18, 6090), (19, 6096), (20, 6111), (23, 6132), (35, 6177), (45, 6243), (50, 6279), (58, 6345), (61, 6363), (72, 6456),

Gene: NovoPizza_39 Start: 33244, Stop: 32846, Start Num: 25

Candidate Starts for NovoPizza_39:

(6, 33415), (14, 33316), (17, 33304), (25, 33244), (32, 33205), (36, 33187), (43, 33145), (53, 33064), (55, 33046), (64, 32986), (73, 32905), (74, 32902), (78, 32860),

Gene: OlympiaSaint_78 Start: 48472, Stop: 48825, Start Num: 26

Candidate Starts for OlympiaSaint_78:

(Start: 26 @48472 has 25 MA's), (32, 48499), (53, 48631), (62, 48709), (63, 48712), (75, 48802),

Gene: Outis_9 Start: 5229, Stop: 5666, Start Num: 13

Candidate Starts for Outis_9:

(Start: 13 @5229 has 11 MA's), (20, 5268), (21, 5277), (35, 5334), (43, 5385), (45, 5403), (72, 5616),

Gene: OwlsT2W_80 Start: 48157, Stop: 48510, Start Num: 26

Candidate Starts for OwlsT2W_80:

(Start: 26 @48157 has 25 MA's), (32, 48184), (53, 48316), (62, 48394), (63, 48397), (75, 48487),

Gene: Pemberton_9 Start: 4236, Stop: 4703, Start Num: 10

Candidate Starts for Pemberton_9:

(1, 3747), (2, 3864), (Start: 10 @4236 has 3 MA's), (38, 4392), (42, 4407), (43, 4410), (66, 4593), (68, 4605),

Gene: Peridot_83 Start: 48830, Stop: 49186, Start Num: 26

Candidate Starts for Peridot_83:

(Start: 26 @48830 has 25 MA's), (32, 48857), (63, 49073),

Gene: Philus_81 Start: 50171, Stop: 50524, Start Num: 26

Candidate Starts for Philus_81:

(Start: 26 @50171 has 25 MA's), (32, 50198), (53, 50330), (62, 50408), (63, 50411), (75, 50501),

Gene: PhlipPhlop_80 Start: 52180, Stop: 52536, Start Num: 26

Candidate Starts for PhlipPhlop_80:

(9, 52084), (Start: 26 @52180 has 25 MA's), (32, 52207), (63, 52423),

Gene: Pleakley_13 Start: 5917, Stop: 6342, Start Num: 11

Candidate Starts for Pleakley_13:

(Start: 11 @5917 has 3 MA's), (18, 5944), (21, 5974), (63, 6214), (69, 6256),

Gene: RedWattleHog_160 Start: 106582, Stop: 106965, Start Num: 22

Candidate Starts for RedWattleHog_160:

(Start: 22 @106582 has 2 MA's), (32, 106627), (34, 106633), (37, 106648), (48, 106720), (71, 106909),

Gene: Renaud18_88 Start: 49125, Stop: 49478, Start Num: 26

Candidate Starts for Renaud18_88:

(9, 49029), (Start: 26 @49125 has 25 MA's), (32, 49152), (53, 49284), (62, 49362), (63, 49365), (75, 49455),

Gene: Scuba_13 Start: 6015, Stop: 6443, Start Num: 11

Candidate Starts for Scuba_13:

(Start: 11 @6015 has 3 MA's), (18, 6042), (19, 6048), (21, 6072), (69, 6357), (70, 6381),

Gene: ShroomBoi_79 Start: 48390, Stop: 48743, Start Num: 26

Candidate Starts for ShroomBoi_79:

(Start: 26 @48390 has 25 MA's), (32, 48417), (53, 48549), (62, 48627), (63, 48630), (75, 48720),

Gene: Spikelee_85 Start: 50696, Stop: 51049, Start Num: 26

Candidate Starts for Spikelee_85:

(Start: 26 @50696 has 25 MA's), (32, 50723), (53, 50855), (63, 50936), (74, 51020),

Gene: StarStruck_9 Start: 5229, Stop: 5666, Start Num: 13

Candidate Starts for StarStruck_9:

(Start: 13 @5229 has 11 MA's), (20, 5268), (21, 5277), (35, 5334), (43, 5385), (45, 5403), (72, 5616),

Gene: Starcevich_79 Start: 49396, Stop: 49752, Start Num: 26

Candidate Starts for Starcevich_79:

(Start: 26 @49396 has 25 MA's), (32, 49423), (63, 49639),

Gene: Stormageddon_161 Start: 107546, Stop: 107929, Start Num: 22

Candidate Starts for Stormageddon_161:

(Start: 22 @107546 has 2 MA's), (32, 107591), (34, 107597), (37, 107612), (48, 107684), (71, 107873),

Gene: Sukkupi_9 Start: 4277, Stop: 4744, Start Num: 10

Candidate Starts for Sukkupi_9:

(Start: 10 @4277 has 3 MA's), (38, 4433), (42, 4448), (43, 4451), (66, 4634), (68, 4646),

Gene: SuperSulley_9 Start: 5315, Stop: 5746, Start Num: 13

Candidate Starts for SuperSulley_9:

(Start: 13 @5315 has 11 MA's), (19, 5336), (35, 5417), (43, 5465), (45, 5483), (50, 5519), (72, 5696),

Gene: TChen_80 Start: 49777, Stop: 50130, Start Num: 26

Candidate Starts for TChen_80:

(Start: 26 @49777 has 25 MA's), (32, 49804), (53, 49936), (62, 50014), (63, 50017), (75, 50107),

Gene: Totinger_81 Start: 48192, Stop: 48548, Start Num: 26

Candidate Starts for Totinger_81:

(Start: 26 @48192 has 25 MA's), (32, 48219), (63, 48435),

Gene: Towmatter_95 Start: 64634, Stop: 65026, Start Num: 27

Candidate Starts for Towmatter_95:

(Start: 27 @64634 has 2 MA's), (52, 64787), (59, 64847), (63, 64883), (68, 64916), (77, 65003),

Gene: Turuncu_10 Start: 5145, Stop: 5576, Start Num: 13

Candidate Starts for Turuncu_10:

(Start: 13 @5145 has 11 MA's), (43, 5295), (45, 5313), (72, 5529),

Gene: Typha_60 Start: 44340, Stop: 44672, Start Num: 30

Candidate Starts for Typha_60:

(Start: 30 @44340 has 3 MA's), (31, 44352), (34, 44364), (41, 44397), (44, 44412), (46, 44427), (54, 44484), (57, 44508), (70, 44613), (71, 44625), (76, 44649),

Gene: Violac_80 Start: 49457, Stop: 49813, Start Num: 26

Candidate Starts for Violac_80:

(Start: 26 @49457 has 25 MA's), (32, 49484), (62, 49697), (63, 49700), (74, 49784), (76, 49793),

Gene: Vivum_81 Start: 50082, Stop: 50438, Start Num: 26

Candidate Starts for Vivum_81:

(9, 49986), (Start: 26 @50082 has 25 MA's), (32, 50109), (63, 50325),

Gene: WhoseManz_8 Start: 3732, Stop: 4190, Start Num: 15

Candidate Starts for WhoseManz_8:

(Start: 15 @3732 has 3 MA's), (Start: 27 @3813 has 2 MA's), (38, 3879), (42, 3894), (43, 3897), (66, 4080), (68, 4092),

Gene: Yndexa_9 Start: 4277, Stop: 4744, Start Num: 10

Candidate Starts for Yndexa_9:

(Start: 10 @4277 has 3 MA's), (38, 4433), (42, 4448), (43, 4451), (66, 4634), (68, 4646),