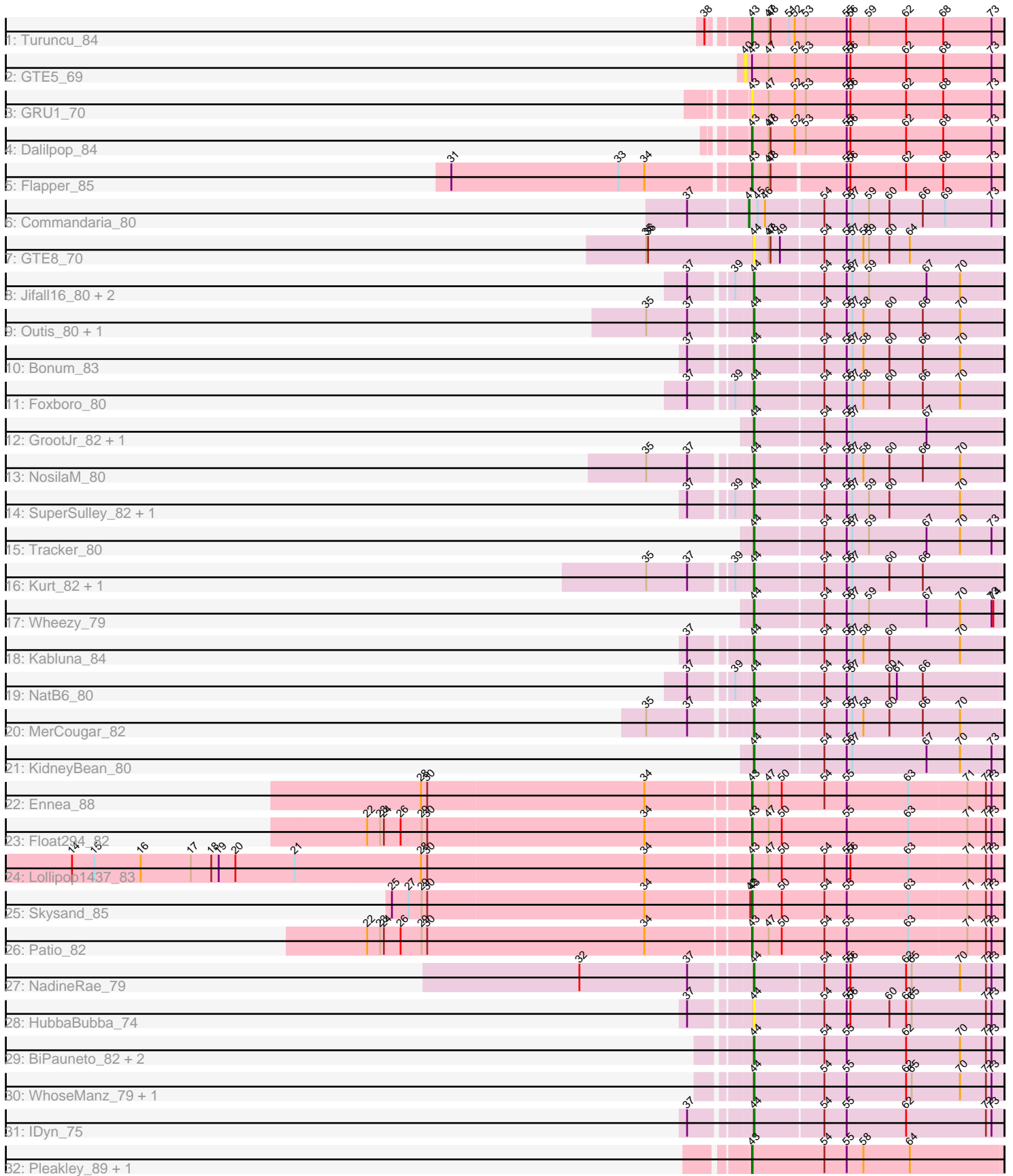


Zoomed Pham 2101



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 2101 Report

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

Pham number 2101 has 42 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Turuncu_84
- Track 2 : GTE5_69
- Track 3 : GRU1_70
- Track 4 : Dalilpop_84
- Track 5 : Flapper_85
- Track 6 : Commandaria_80
- Track 7 : GTE8_70
- Track 8 : Jifall16_80, Phomeo_80, Arti_78
- Track 9 : Outis_80, StarStruck_80
- Track 10 : Bonum_83
- Track 11 : Foxboro_80
- Track 12 : GrootJr_82, NovumRegina_80
- Track 13 : NosilaM_80
- Track 14 : SuperSulley_82, Buggaboo_82
- Track 15 : Tracker_80
- Track 16 : Kurt_82, Emianna_82
- Track 17 : Wheezy_79
- Track 18 : Kabluna_84
- Track 19 : NatB6_80
- Track 20 : MerCougar_82
- Track 21 : KidneyBean_80
- Track 22 : Ennea_88
- Track 23 : Float294_82
- Track 24 : Lollipop1437_83
- Track 25 : Skysand_85
- Track 26 : Patio_82
- Track 27 : NadineRae_79
- Track 28 : HubbaBubba_74
- Track 29 : BiPauneto_82, Sukkupi_79, Yndexa_79
- Track 30 : WhoseManz_79, Marietta_79
- Track 31 : IDyn_75
- Track 32 : Pleakley_89, Fury_89

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

The start number called the most often in the published annotations is 44, it was called in 26 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arti_78, BiPauneto_82, Bonum_83, Buggaboo_82, Emianna_82, Foxboro_80, GTE8_70, GrootJr_82, HubbaBubba_74, IDyn_75, Jifall16_80, Kabluna_84, KidneyBean_80, Kurt_82, Marietta_79, MerCougar_82, NadineRae_79, NatB6_80, NosilaM_80, NovumRegina_80, Outis_80, Phomeo_80, StarStruck_80, Sukkupi_79, SuperSulley_82, Tracker_80, Wheezy_79, WhoseManz_79, Yndexa_79,

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

-

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

- Commandaria_80, Dalilpop_84, Ennea_88, Flapper_85, Float294_82, Fury_89, GRU1_70, GTE5_69, Lollipop1437_83, Patio_82, Pleakley_89, Skysand_85, Turuncu_84,

Summary by start number:

Start 40:

- Found in 1 of 42 (2.4%) 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_69 (CR1),

Start 41:

- Found in 1 of 42 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Commandaria_80 (CR2),

Start 43:

- Found in 12 of 42 (28.6%) of genes in pham
- Manual Annotations of this start: 10 of 37
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Dalilpop_84 (CR1), Ennea_88 (CR3), Flapper_85 (CR1), Float294_82 (CR3), Fury_89 (CR5), GRU1_70 (CR1), Lollipop1437_83 (CR3), Patio_82 (CR3), Pleakley_89 (CR5), Skysand_85 (CR3), Turuncu_84 (CR1),

Start 44:

- Found in 29 of 42 (69.0%) of genes in pham
- Manual Annotations of this start: 26 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arti_78 (CR2), BiPauneto_82 (CR4), Bonum_83 (CR2), Buggaboo_82 (CR2), Emianna_82 (CR2), Foxboro_80 (CR2), GTE8_70 (CR2), GrootJr_82 (CR2), HubbaBubba_74 (CR4), IDyn_75 (CR4), Jifall16_80 (CR2), Kabluna_84 (CR2), KidneyBean_80 (CR2), Kurt_82 (CR2), Marietta_79 (CR4), MerCougar_82 (CR2), NadineRae_79 (CR4), NatB6_80 (CR2), NosilaM_80 (CR2), NovumRegina_80 (CR2), Outis_80 (CR2), Phomeo_80 (CR2), StarStruck_80 (CR2), Sukkupi_79 (CR4), SuperSulley_82 (CR2), Tracker_80 (CR2),

Wheezy_79 (CR2), WhoseManz_79 (CR4), Yndexa_79 (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 43 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 41 was manually annotated 1 time for cluster CR2.
- Start number 44 was manually annotated 19 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 43 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 44 was manually annotated 7 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 43 was manually annotated 2 times for cluster CR5.

Gene Information:

Gene: Arti_78 Start: 59180, Stop: 59575, Start Num: 44

Candidate Starts for Arti_78:

(37, 59096), (39, 59156), (Start: 44 @59180 has 26 MA's), (54, 59288), (55, 59324), (57, 59333), (59, 59360), (67, 59453), (70, 59507),

Gene: BiPauneto_82 Start: 58588, Stop: 58980, Start Num: 44

Candidate Starts for BiPauneto_82:

(Start: 44 @58588 has 26 MA's), (54, 58696), (55, 58729), (62, 58825), (70, 58912), (72, 58954), (73, 58963),

Gene: Bonum_83 Start: 60569, Stop: 60961, Start Num: 44

Candidate Starts for Bonum_83:

(37, 60482), (Start: 44 @60569 has 26 MA's), (54, 60677), (55, 60713), (57, 60722), (58, 60740), (60, 60782), (66, 60836), (70, 60896),

Gene: Buggaboo_82 Start: 61104, Stop: 61496, Start Num: 44

Candidate Starts for Buggaboo_82:

(37, 61020), (39, 61080), (Start: 44 @61104 has 26 MA's), (54, 61212), (55, 61248), (57, 61257), (59, 61284), (60, 61317), (70, 61431),

Gene: Commandaria_80 Start: 60680, Stop: 61081, Start Num: 41

Candidate Starts for Commandaria_80:

(37, 60587), (Start: 41 @60680 has 1 MA's), (45, 60692), (46, 60704), (54, 60794), (55, 60830), (57, 60839), (59, 60866), (60, 60899), (66, 60953), (69, 60989), (73, 61064),

Gene: Dalilpop_84 Start: 61106, Stop: 61513, Start Num: 43

Candidate Starts for Dalilpop_84:

(Start: 43 @61106 has 10 MA's), (47, 61133), (48, 61136), (52, 61175), (53, 61193), (55, 61259), (56, 61265), (62, 61355), (68, 61415), (73, 61493),

Gene: Emianna_82 Start: 60869, Stop: 61264, Start Num: 44

Candidate Starts for Emianna_82:

(35, 60719), (37, 60785), (39, 60845), (Start: 44 @60869 has 26 MA's), (54, 60977), (55, 61013), (57, 61022), (60, 61082), (66, 61136),

Gene: Ennea_88 Start: 61512, Stop: 61913, Start Num: 43

Candidate Starts for Ennea_88:

(28, 60996), (30, 61005), (34, 61353), (Start: 43 @61512 has 10 MA's), (47, 61539), (50, 61560), (54, 61629), (55, 61665), (63, 61764), (71, 61857), (72, 61887), (73, 61896),

Gene: Flapper_85 Start: 61184, Stop: 61582, Start Num: 43

Candidate Starts for Flapper_85:

(31, 60716), (33, 60986), (34, 61028), (Start: 43 @61184 has 10 MA's), (47, 61211), (48, 61214), (55, 61328), (56, 61334), (62, 61424), (68, 61484), (73, 61562),

Gene: Float294_82 Start: 61416, Stop: 61817, Start Num: 43

Candidate Starts for Float294_82:

(22, 60813), (23, 60834), (24, 60840), (26, 60867), (29, 60900), (30, 60909), (34, 61257), (Start: 43 @61416 has 10 MA's), (47, 61443), (50, 61464), (55, 61569), (63, 61668), (71, 61761), (72, 61791), (73, 61800),

Gene: Foxboro_80 Start: 60610, Stop: 61005, Start Num: 44

Candidate Starts for Foxboro_80:

(37, 60526), (39, 60586), (Start: 44 @60610 has 26 MA's), (54, 60718), (55, 60754), (57, 60763), (58, 60781), (60, 60823), (66, 60877), (70, 60937),

Gene: Fury_89 Start: 59441, Stop: 59845, Start Num: 43

Candidate Starts for Fury_89:

(Start: 43 @59441 has 10 MA's), (54, 59558), (55, 59594), (58, 59621), (64, 59696),

Gene: GRU1_70 Start: 52559, Stop: 52966, Start Num: 43

Candidate Starts for GRU1_70:

(Start: 43 @52559 has 10 MA's), (47, 52586), (52, 52628), (53, 52646), (55, 52712), (56, 52718), (62, 52808), (68, 52868), (73, 52946),

Gene: GTE5_69 Start: 53451, Stop: 53867, Start Num: 40

Candidate Starts for GTE5_69:

(40, 53451), (Start: 43 @53460 has 10 MA's), (47, 53487), (52, 53529), (53, 53547), (55, 53613), (56, 53619), (62, 53709), (68, 53769), (73, 53847),

Gene: GTE8_70 Start: 54170, Stop: 54565, Start Num: 44

Candidate Starts for GTE8_70:

(35, 53996), (36, 53999), (Start: 44 @54170 has 26 MA's), (47, 54194), (48, 54197), (49, 54212), (54, 54278), (55, 54314), (57, 54323), (58, 54341), (59, 54350), (60, 54383), (64, 54416),

Gene: GrootJr_82 Start: 59868, Stop: 60263, Start Num: 44

Candidate Starts for GrootJr_82:

(Start: 44 @59868 has 26 MA's), (54, 59976), (55, 60012), (57, 60021), (67, 60141),

Gene: HubbaBubba_74 Start: 55206, Stop: 55598, Start Num: 44

Candidate Starts for HubbaBubba_74:

(37, 55119), (Start: 44 @55206 has 26 MA's), (54, 55314), (55, 55347), (56, 55353), (60, 55416), (62, 55443), (65, 55452), (72, 55572), (73, 55581),

Gene: IDyn_75 Start: 55588, Stop: 55980, Start Num: 44

Candidate Starts for IDyn_75:

(37, 55501), (Start: 44 @55588 has 26 MA's), (54, 55696), (55, 55729), (62, 55825), (72, 55954), (73, 55963),

Gene: Jifall16_80 Start: 60096, Stop: 60491, Start Num: 44

Candidate Starts for Jifall16_80:

(37, 60012), (39, 60072), (Start: 44 @60096 has 26 MA's), (54, 60204), (55, 60240), (57, 60249), (59, 60276), (67, 60369), (70, 60423),

Gene: Kabluna_84 Start: 59919, Stop: 60311, Start Num: 44

Candidate Starts for Kabluna_84:

(37, 59832), (Start: 44 @59919 has 26 MA's), (54, 60027), (55, 60063), (57, 60072), (58, 60090), (60, 60132), (70, 60246),

Gene: KidneyBean_80 Start: 60297, Stop: 60692, Start Num: 44

Candidate Starts for KidneyBean_80:

(Start: 44 @60297 has 26 MA's), (54, 60405), (55, 60441), (57, 60450), (67, 60570), (70, 60624), (73, 60675),

Gene: Kurt_82 Start: 60884, Stop: 61279, Start Num: 44

Candidate Starts for Kurt_82:

(35, 60734), (37, 60800), (39, 60860), (Start: 44 @60884 has 26 MA's), (54, 60992), (55, 61028), (57, 61037), (60, 61097), (66, 61151),

Gene: Lollipop1437_83 Start: 61208, Stop: 61609, Start Num: 43

Candidate Starts for Lollipop1437_83:

(1, 59312), (2, 59336), (3, 59369), (4, 59549), (5, 59597), (6, 59639), (7, 59696), (8, 59741), (9, 59771), (10, 59801), (11, 59831), (12, 59906), (13, 59930), (14, 60131), (15, 60167), (16, 60242), (17, 60323), (18, 60356), (19, 60368), (20, 60395), (21, 60491), (28, 60692), (30, 60701), (34, 61049), (Start: 43 @61208 has 10 MA's), (47, 61235), (50, 61256), (54, 61325), (55, 61361), (56, 61367), (63, 61460), (71, 61553), (72, 61583), (73, 61592),

Gene: Marietta_79 Start: 56487, Stop: 56879, Start Num: 44

Candidate Starts for Marietta_79:

(Start: 44 @56487 has 26 MA's), (54, 56595), (55, 56628), (62, 56724), (65, 56733), (70, 56811), (72, 56853), (73, 56862),

Gene: MerCougar_82 Start: 61543, Stop: 61935, Start Num: 44

Candidate Starts for MerCougar_82:

(35, 61390), (37, 61456), (Start: 44 @61543 has 26 MA's), (54, 61651), (55, 61687), (57, 61696), (58, 61714), (60, 61756), (66, 61810), (70, 61870),

Gene: NadineRae_79 Start: 56081, Stop: 56473, Start Num: 44

Candidate Starts for NadineRae_79:

(32, 55820), (37, 55994), (Start: 44 @56081 has 26 MA's), (54, 56189), (55, 56222), (56, 56228), (62, 56318), (65, 56327), (70, 56405), (72, 56447), (73, 56456),

Gene: NatB6_80 Start: 59503, Stop: 59898, Start Num: 44

Candidate Starts for NatB6_80:

(37, 59419), (39, 59479), (Start: 44 @59503 has 26 MA's), (54, 59611), (55, 59647), (57, 59656), (60, 59716), (61, 59728), (66, 59770),

Gene: NosilaM_80 Start: 60174, Stop: 60566, Start Num: 44

Candidate Starts for NosilaM_80:

(35, 60021), (37, 60087), (Start: 44 @60174 has 26 MA's), (54, 60282), (55, 60318), (57, 60327), (58, 60345), (60, 60387), (66, 60441), (70, 60501),

Gene: NovumRegina_80 Start: 59867, Stop: 60262, Start Num: 44

Candidate Starts for NovumRegina_80:

(Start: 44 @59867 has 26 MA's), (54, 59975), (55, 60011), (57, 60020), (67, 60140),

Gene: Outis_80 Start: 60644, Stop: 61036, Start Num: 44

Candidate Starts for Outis_80:

(35, 60491), (37, 60557), (Start: 44 @60644 has 26 MA's), (54, 60752), (55, 60788), (57, 60797), (58, 60815), (60, 60857), (66, 60911), (70, 60971),

Gene: Patio_82 Start: 60406, Stop: 60807, Start Num: 43

Candidate Starts for Patio_82:

(22, 59800), (23, 59821), (24, 59827), (26, 59854), (29, 59887), (30, 59896), (34, 60247), (Start: 43 @60406 has 10 MA's), (47, 60433), (50, 60454), (54, 60523), (55, 60559), (63, 60658), (71, 60751), (72, 60781), (73, 60790),

Gene: Phomeo_80 Start: 60092, Stop: 60487, Start Num: 44

Candidate Starts for Phomeo_80:

(37, 60008), (39, 60068), (Start: 44 @60092 has 26 MA's), (54, 60200), (55, 60236), (57, 60245), (59, 60272), (67, 60365), (70, 60419),

Gene: Pleakley_89 Start: 59442, Stop: 59846, Start Num: 43

Candidate Starts for Pleakley_89:

(Start: 43 @59442 has 10 MA's), (54, 59559), (55, 59595), (58, 59622), (64, 59697),

Gene: Skysand_85 Start: 61329, Stop: 61730, Start Num: 43

Candidate Starts for Skysand_85:

(25, 60765), (27, 60792), (29, 60813), (30, 60822), (34, 61170), (42, 61326), (Start: 43 @61329 has 10 MA's), (50, 61377), (54, 61446), (55, 61482), (63, 61581), (71, 61674), (72, 61704), (73, 61713),

Gene: StarStruck_80 Start: 60644, Stop: 61036, Start Num: 44

Candidate Starts for StarStruck_80:

(35, 60491), (37, 60557), (Start: 44 @60644 has 26 MA's), (54, 60752), (55, 60788), (57, 60797), (58, 60815), (60, 60857), (66, 60911), (70, 60971),

Gene: Sukkupi_79 Start: 58129, Stop: 58521, Start Num: 44

Candidate Starts for Sukkupi_79:

(Start: 44 @58129 has 26 MA's), (54, 58237), (55, 58270), (62, 58366), (70, 58453), (72, 58495), (73, 58504),

Gene: SuperSulley_82 Start: 61104, Stop: 61496, Start Num: 44

Candidate Starts for SuperSulley_82:

(37, 61020), (39, 61080), (Start: 44 @61104 has 26 MA's), (54, 61212), (55, 61248), (57, 61257), (59, 61284), (60, 61317), (70, 61431),

Gene: Tracker_80 Start: 59314, Stop: 59709, Start Num: 44

Candidate Starts for Tracker_80:

(Start: 44 @59314 has 26 MA's), (54, 59422), (55, 59458), (57, 59467), (59, 59494), (67, 59587), (70, 59641), (73, 59692),

Gene: Turuncu_84 Start: 60569, Stop: 60976, Start Num: 43

Candidate Starts for Turuncu_84:

(38, 60512), (Start: 43 @60569 has 10 MA's), (47, 60596), (48, 60599), (51, 60629), (52, 60638), (53, 60656), (55, 60722), (56, 60728), (59, 60758), (62, 60818), (68, 60878), (73, 60956),

Gene: Wheezy_79 Start: 59536, Stop: 59931, Start Num: 44

Candidate Starts for Wheezy_79:

(Start: 44 @59536 has 26 MA's), (54, 59644), (55, 59680), (57, 59689), (59, 59716), (67, 59809), (70, 59863), (73, 59914), (74, 59917),

Gene: WhoseManz_79 Start: 56147, Stop: 56539, Start Num: 44

Candidate Starts for WhoseManz_79:

(Start: 44 @56147 has 26 MA's), (54, 56255), (55, 56288), (62, 56384), (65, 56393), (70, 56471), (72, 56513), (73, 56522),

Gene: Yndexa_79 Start: 58129, Stop: 58521, Start Num: 44

Candidate Starts for Yndexa_79:

(Start: 44 @58129 has 26 MA's), (54, 58237), (55, 58270), (62, 58366), (70, 58453), (72, 58495), (73, 58504),