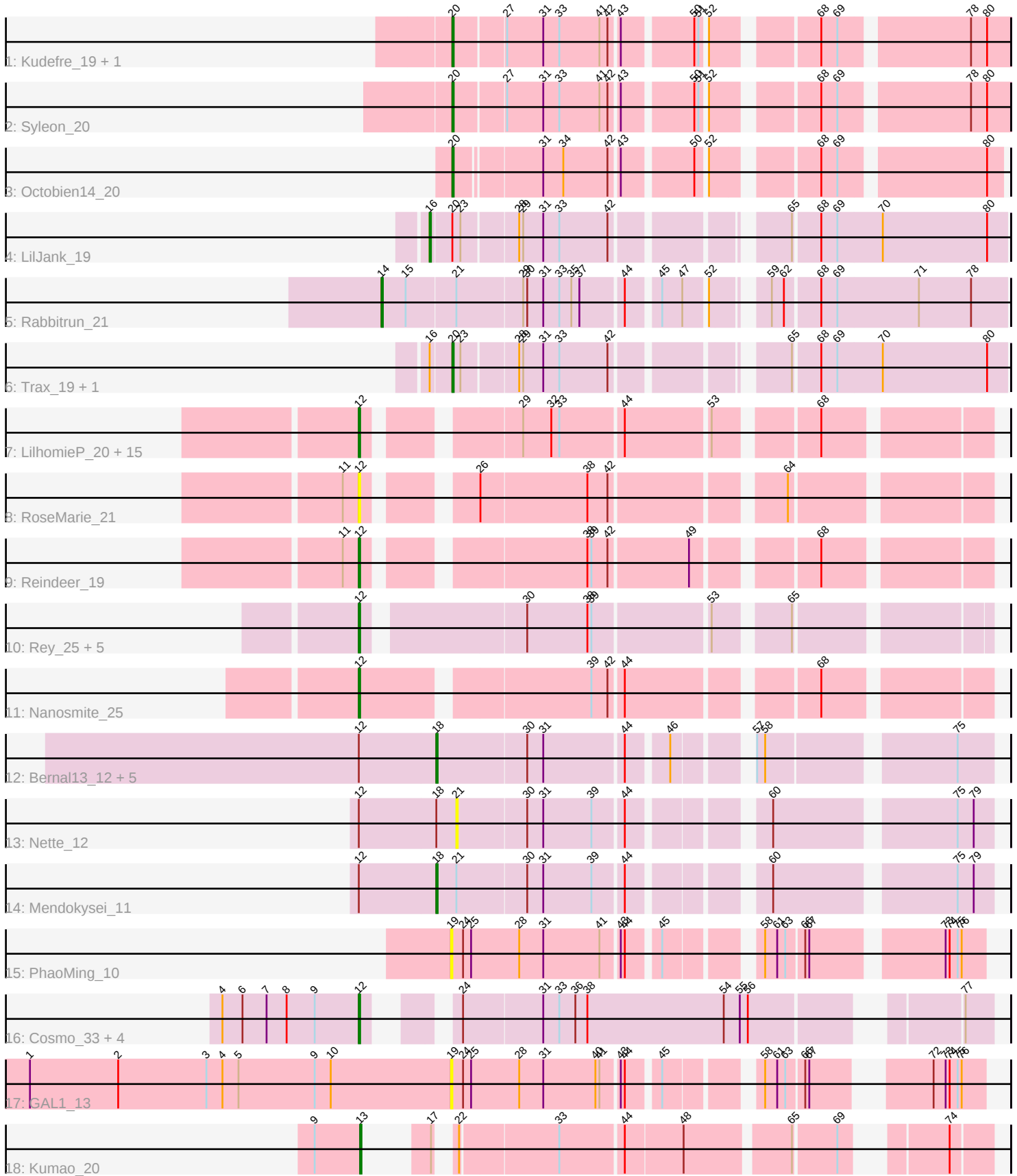


Pham 321509



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 321509 Report

This analysis was run 09/05/26 on database version 662.

Pham number 321509 has 49 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Kudefre_19, Sephiroth_20
- Track 2 : Syleon_20
- Track 3 : Octobien14_20
- Track 4 : LilJank_19
- Track 5 : Rabbitrun_21
- Track 6 : Trax_19, Neville_19
- Track 7 : LilhomieP_20, SlimJimmy_20, KleverKiS_21, Dulcita_22, PegLeg_21, TyDawg_21, Izel_22, Glaske16_22, Bricole_21, Diminimus_22, Auspice_21, TpudiCK_22, IPhane7_21, Skinny_22, FreakyGoo_22, Bongo_21
- Track 8 : RoseMarie_21
- Track 9 : Reindeer_19
- Track 10 : Rey_25, Aziz_25, MrMagoo_25, Estes_26, GenevaB15_25, GardenSalsa_25
- Track 11 : Nanosmite_25
- Track 12 : Bernal13_12, ZenTime222_12, Nairb_12, Whitty_12, RonRayGun_12, Ibrahim_12
- Track 13 : Nette_12
- Track 14 : Mendokysei_11
- Track 15 : PhaoMing_10
- Track 16 : Cosmo_33, MaryV_33, Azrael100_32, Wildcat_33, EniyanLRS_30
- Track 17 : GAL1_13
- Track 18 : Kumao_20

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 27 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice_21, Aziz_25, Azrael100_32, Bongo_21, Bricole_21, Cosmo_33, Diminimus_22, Dulcita_22, EniyanLRS_30, Estes_26, FreakyGoo_22, GardenSalsa_25, GenevaB15_25, Glaske16_22, IPhane7_21, Izel_22, KleverKiS_21, LilhomieP_20, MaryV_33, MrMagoo_25, Nanosmite_25, PegLeg_21, Reindeer_19, Rey_25, RoseMarie_21, Skinny_22, SlimJimmy_20, TpudiCK_22,

TyDawg_21, Wildcat_33,

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

- Bernal13_12, Ibrahim_12, Mendokysei_11, Nairb_12, Nette_12, RonRayGun_12, Whitty_12, ZenTime222_12,

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

- GAL1_13, Kudrefre_19, Kumao_20, LilJank_19, Neville_19, Octobien14_20, PhaoMing_10, Rabbitrun_21, Sephiroth_20, Syleon_20, Trax_19,

Summary by start number:

Start 12:

- Found in 38 of 49 (77.6%) of genes in pham
- Manual Annotations of this start: 27 of 43
- Called 78.9% of time when present
- Phage (with cluster) where this start called: Auspice_21 (M1), Aziz_25 (M2), Azrael100_32 (V), Bongo_21 (M1), Bricole_21 (M1), Cosmo_33 (V), Diminimus_22 (M1), Dulcita_22 (M1), EniyanLRS_30 (V), Estes_26 (M2), FreakyGoo_22 (M1), GardenSalsa_25 (M2), GenevaB15_25 (M2), Glaske16_22 (M1), IPhane7_21 (M1), Izel_22 (M1), KleverKiS_21 (M1), LilhomieP_20 (M1), MaryV_33 (V), MrMagoo_25 (M2), Nanosmite_25 (M3), PegLeg_21 (M1), Reindeer_19 (M1), Rey_25 (M2), RoseMarie_21 (M1), Skinny_22 (M1), SlimJimmy_20 (M1), TpudiCK_22 (M1), TyDawg_21 (M1), Wildcat_33 (V),

Start 13:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao_20 (singleton),

Start 14:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rabbitrun_21 (DU2),

Start 16:

- Found in 3 of 49 (6.1%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 33.3% of time when present
- Phage (with cluster) where this start called: LilJank_19 (DU2),

Start 18:

- Found in 8 of 49 (16.3%) of genes in pham
- Manual Annotations of this start: 7 of 43
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Bernal13_12 (T), Ibrahim_12 (T), Mendokysei_11 (T), Nairb_12 (T), RonRayGun_12 (T), Whitty_12 (T), ZenTime222_12 (T),

Start 19:

- Found in 2 of 49 (4.1%) of genes in pham

- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GAL1_13 (singleton), PhaoMing_10 (UNK),

Start 20:

- Found in 7 of 49 (14.3%) of genes in pham
- Manual Annotations of this start: 6 of 43
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Kudrefre_19 (DU1), Neville_19 (DU2), Octobien14_20 (DU1), Sephiroth_20 (DU1), Syleon_20 (DU1), Trax_19 (DU2),

Start 21:

- Found in 3 of 49 (6.1%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Nette_12 (T),

Summary by clusters:

There are 9 clusters represented in this pham: singleton, V, M1, T, M3, M2, DU1, DU2, UNK,

Info for manual annotations of cluster DU1:

- Start number 20 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 14 was manually annotated 1 time for cluster DU2.
- Start number 16 was manually annotated 1 time for cluster DU2.
- Start number 20 was manually annotated 2 times for cluster DU2.

Info for manual annotations of cluster M1:

- Start number 12 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 12 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 12 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster T:

- Start number 18 was manually annotated 7 times for cluster T.

Info for manual annotations of cluster V:

- Start number 12 was manually annotated 5 times for cluster V.

Gene Information:

Gene: Auspice_21 Start: 11871, Stop: 12275, Start Num: 12

Candidate Starts for Auspice_21:

(Start: 12 @11871 has 27 MA's), (29, 11964), (32, 11985), (33, 11991), (44, 12036), (53, 12096), (68, 12162),

Gene: Aziz_25 Start: 12434, Stop: 12850, Start Num: 12

Candidate Starts for Aziz_25:

(Start: 12 @12434 has 27 MA's), (30, 12545), (38, 12590), (39, 12593), (53, 12674), (65, 12722),

Gene: Azrael100_32 Start: 14960, Stop: 15355, Start Num: 12

Candidate Starts for Azrael100_32:

(4, 14858), (6, 14873), (7, 14891), (8, 14906), (9, 14927), (Start: 12 @14960 has 27 MA's), (24, 14999), (31, 15056), (33, 15068), (36, 15080), (38, 15089), (54, 15191), (55, 15203), (56, 15209), (77, 15335),

Gene: Bernal13_12 Start: 9006, Stop: 9371, Start Num: 18

Candidate Starts for Bernal13_12:

(Start: 12 @8949 has 27 MA's), (Start: 18 @9006 has 7 MA's), (30, 9072), (31, 9084), (44, 9141), (46, 9168), (57, 9213), (58, 9219), (75, 9345),

Gene: Bongo_21 Start: 11871, Stop: 12275, Start Num: 12

Candidate Starts for Bongo_21:

(Start: 12 @11871 has 27 MA's), (29, 11964), (32, 11985), (33, 11991), (44, 12036), (53, 12096), (68, 12162),

Gene: Bricole_21 Start: 11870, Stop: 12274, Start Num: 12

Candidate Starts for Bricole_21:

(Start: 12 @11870 has 27 MA's), (29, 11963), (32, 11984), (33, 11990), (44, 12035), (53, 12095), (68, 12161),

Gene: Cosmo_33 Start: 14967, Stop: 15362, Start Num: 12

Candidate Starts for Cosmo_33:

(4, 14865), (6, 14880), (7, 14898), (8, 14913), (9, 14934), (Start: 12 @14967 has 27 MA's), (24, 15006), (31, 15063), (33, 15075), (36, 15087), (38, 15096), (54, 15198), (55, 15210), (56, 15216), (77, 15342),

Gene: Diminimus_22 Start: 11870, Stop: 12274, Start Num: 12

Candidate Starts for Diminimus_22:

(Start: 12 @11870 has 27 MA's), (29, 11963), (32, 11984), (33, 11990), (44, 12035), (53, 12095), (68, 12161),

Gene: Dulcita_22 Start: 11870, Stop: 12274, Start Num: 12

Candidate Starts for Dulcita_22:

(Start: 12 @11870 has 27 MA's), (29, 11963), (32, 11984), (33, 11990), (44, 12035), (53, 12095), (68, 12161),

Gene: EniyanLRS_30 Start: 14661, Stop: 15056, Start Num: 12

Candidate Starts for EniyanLRS_30:

(4, 14559), (6, 14574), (7, 14592), (8, 14607), (9, 14628), (Start: 12 @14661 has 27 MA's), (24, 14700), (31, 14757), (33, 14769), (36, 14781), (38, 14790), (54, 14892), (55, 14904), (56, 14910), (77, 15036),

Gene: Estes_26 Start: 12571, Stop: 12987, Start Num: 12

Candidate Starts for Estes_26:

(Start: 12 @12571 has 27 MA's), (30, 12682), (38, 12727), (39, 12730), (53, 12811), (65, 12859),

Gene: FreakyGoo_22 Start: 11871, Stop: 12275, Start Num: 12

Candidate Starts for FreakyGoo_22:

(Start: 12 @11871 has 27 MA's), (29, 11964), (32, 11985), (33, 11991), (44, 12036), (53, 12096), (68, 12162),

Gene: GAL1_13 Start: 8895, Stop: 9233, Start Num: 19

Candidate Starts for GAL1_13:

(1, 8580), (2, 8646), (3, 8712), (4, 8724), (5, 8736), (9, 8793), (10, 8805), (19, 8895), (24, 8904), (25, 8910), (28, 8946), (31, 8964), (40, 9003), (41, 9006), (43, 9018), (44, 9021), (45, 9042), (58, 9099), (61, 9108), (63, 9114), (66, 9126), (67, 9129), (72, 9195), (73, 9204), (74, 9207), (75, 9213), (76, 9216),

Gene: GardenSalsa_25 Start: 12407, Stop: 12823, Start Num: 12

Candidate Starts for GardenSalsa_25:

(Start: 12 @12407 has 27 MA's), (30, 12518), (38, 12563), (39, 12566), (53, 12647), (65, 12695),

Gene: GenevaB15_25 Start: 12434, Stop: 12850, Start Num: 12

Candidate Starts for GenevaB15_25:

(Start: 12 @12434 has 27 MA's), (30, 12545), (38, 12590), (39, 12593), (53, 12674), (65, 12722),

Gene: Glaske16_22 Start: 11870, Stop: 12274, Start Num: 12

Candidate Starts for Glaske16_22:

(Start: 12 @11870 has 27 MA's), (29, 11963), (32, 11984), (33, 11990), (44, 12035), (53, 12095), (68, 12161),

Gene: IPhone7_21 Start: 11871, Stop: 12275, Start Num: 12

Candidate Starts for IPhone7_21:

(Start: 12 @11871 has 27 MA's), (29, 11964), (32, 11985), (33, 11991), (44, 12036), (53, 12096), (68, 12162),

Gene: Ibrahim_12 Start: 9006, Stop: 9371, Start Num: 18

Candidate Starts for Ibrahim_12:

(Start: 12 @8949 has 27 MA's), (Start: 18 @9006 has 7 MA's), (30, 9072), (31, 9084), (44, 9141), (46, 9168), (57, 9213), (58, 9219), (75, 9345),

Gene: Izel_22 Start: 11870, Stop: 12274, Start Num: 12

Candidate Starts for Izel_22:

(Start: 12 @11870 has 27 MA's), (29, 11963), (32, 11984), (33, 11990), (44, 12035), (53, 12095), (68, 12161),

Gene: KleverKiS_21 Start: 11867, Stop: 12271, Start Num: 12

Candidate Starts for KleverKiS_21:

(Start: 12 @11867 has 27 MA's), (29, 11960), (32, 11981), (33, 11987), (44, 12032), (53, 12092), (68, 12158),

Gene: Kudfre_19 Start: 11452, Stop: 11817, Start Num: 20

Candidate Starts for Kudfre_19:

(Start: 20 @11452 has 6 MA's), (27, 11488), (31, 11515), (33, 11527), (41, 11557), (42, 11563), (43, 11569), (50, 11617), (51, 11620), (52, 11623), (68, 11689), (69, 11701), (78, 11788), (80, 11800),

Gene: Kumao_20 Start: 11204, Stop: 11566, Start Num: 13

Candidate Starts for Kumao_20:

(9, 11171), (Start: 13 @11204 has 1 MA's), (17, 11219), (22, 11225), (33, 11294), (44, 11339), (48, 11381), (65, 11453), (69, 11483), (74, 11537),

Gene: LilJank_19 Start: 11313, Stop: 11699, Start Num: 16

Candidate Starts for LilJank_19:

(Start: 16 @11313 has 1 MA's), (Start: 20 @11328 has 6 MA's), (23, 11334), (28, 11373), (29, 11376), (31, 11391), (33, 11403), (42, 11439), (65, 11544), (68, 11562), (69, 11574), (70, 11607), (80, 11685),

Gene: LilhomieP_20 Start: 11871, Stop: 12275, Start Num: 12

Candidate Starts for LilhomieP_20:

(Start: 12 @11871 has 27 MA's), (29, 11964), (32, 11985), (33, 11991), (44, 12036), (53, 12096), (68, 12162),

Gene: MaryV_33 Start: 14933, Stop: 15328, Start Num: 12

Candidate Starts for MaryV_33:

(4, 14831), (6, 14846), (7, 14864), (8, 14879), (9, 14900), (Start: 12 @14933 has 27 MA's), (24, 14972), (31, 15029), (33, 15041), (36, 15053), (38, 15062), (54, 15164), (55, 15176), (56, 15182), (77, 15308),

Gene: Mendokysei_11 Start: 8981, Stop: 9349, Start Num: 18

Candidate Starts for Mendokysei_11:

(Start: 12 @8924 has 27 MA's), (Start: 18 @8981 has 7 MA's), (21, 8996), (30, 9047), (31, 9059), (39, 9095), (44, 9116), (60, 9200), (75, 9323), (79, 9335),

Gene: MrMagoo_25 Start: 12407, Stop: 12823, Start Num: 12

Candidate Starts for MrMagoo_25:

(Start: 12 @12407 has 27 MA's), (30, 12518), (38, 12563), (39, 12566), (53, 12647), (65, 12695),

Gene: Nairb_12 Start: 9006, Stop: 9371, Start Num: 18

Candidate Starts for Nairb_12:

(Start: 12 @8949 has 27 MA's), (Start: 18 @9006 has 7 MA's), (30, 9072), (31, 9084), (44, 9141), (46, 9168), (57, 9213), (58, 9219), (75, 9345),

Gene: Nanosmite_25 Start: 12625, Stop: 13041, Start Num: 12

Candidate Starts for Nanosmite_25:

(Start: 12 @12625 has 27 MA's), (39, 12781), (42, 12793), (44, 12802), (68, 12928),

Gene: Nette_12 Start: 9005, Stop: 9358, Start Num: 21

Candidate Starts for Nette_12:

(Start: 12 @8933 has 27 MA's), (Start: 18 @8990 has 7 MA's), (21, 9005), (30, 9056), (31, 9068), (39, 9104), (44, 9125), (60, 9209), (75, 9332), (79, 9344),

Gene: Neville_19 Start: 11277, Stop: 11648, Start Num: 20

Candidate Starts for Neville_19:

(Start: 16 @11262 has 1 MA's), (Start: 20 @11277 has 6 MA's), (23, 11283), (28, 11322), (29, 11325), (31, 11340), (33, 11352), (42, 11388), (65, 11493), (68, 11511), (69, 11523), (70, 11556), (80, 11634),

Gene: Octobien14_20 Start: 12509, Stop: 12865, Start Num: 20

Candidate Starts for Octobien14_20:

(Start: 20 @12509 has 6 MA's), (31, 12569), (34, 12584), (42, 12617), (43, 12623), (50, 12671), (52, 12677), (68, 12743), (69, 12755), (80, 12854),

Gene: PegLeg_21 Start: 11870, Stop: 12274, Start Num: 12

Candidate Starts for PegLeg_21:

(Start: 12 @11870 has 27 MA's), (29, 11963), (32, 11984), (33, 11990), (44, 12035), (53, 12095), (68, 12161),

Gene: PhaoMing_10 Start: 7503, Stop: 7853, Start Num: 19

Candidate Starts for PhaoMing_10:

(19, 7503), (24, 7512), (25, 7518), (28, 7554), (31, 7572), (41, 7614), (43, 7626), (44, 7629), (45, 7650), (58, 7707), (61, 7716), (63, 7722), (66, 7734), (67, 7737), (73, 7824), (74, 7827), (75, 7833), (76, 7836),

Gene: Rabbitrun_21 Start: 11781, Stop: 12206, Start Num: 14

Candidate Starts for Rabbitrun_21:

(Start: 14 @11781 has 1 MA's), (15, 11799), (21, 11835), (29, 11883), (30, 11886), (31, 11898), (33, 11910), (35, 11919), (37, 11925), (44, 11955), (45, 11976), (47, 11991), (52, 12006), (59, 12036), (62, 12045), (68, 12069), (69, 12081), (71, 12141), (78, 12180),

Gene: Reindeer_19 Start: 11723, Stop: 12127, Start Num: 12

Candidate Starts for Reindeer_19:

(11, 11711), (Start: 12 @11723 has 27 MA's), (38, 11864), (39, 11867), (42, 11879), (49, 11936), (68, 12014),

Gene: Rey_25 Start: 12642, Stop: 13055, Start Num: 12

Candidate Starts for Rey_25:

(Start: 12 @12642 has 27 MA's), (30, 12750), (38, 12795), (39, 12798), (53, 12879), (65, 12927),

Gene: RonRayGun_12 Start: 9006, Stop: 9371, Start Num: 18

Candidate Starts for RonRayGun_12:

(Start: 12 @8949 has 27 MA's), (Start: 18 @9006 has 7 MA's), (30, 9072), (31, 9084), (44, 9141), (46, 9168), (57, 9213), (58, 9219), (75, 9345),

Gene: RoseMarie_21 Start: 12114, Stop: 12518, Start Num: 12

Candidate Starts for RoseMarie_21:

(11, 12102), (Start: 12 @12114 has 27 MA's), (26, 12177), (38, 12255), (42, 12270), (64, 12384),

Gene: Sephiroth_20 Start: 11623, Stop: 11988, Start Num: 20

Candidate Starts for Sephiroth_20:

(Start: 20 @11623 has 6 MA's), (27, 11659), (31, 11686), (33, 11698), (41, 11728), (42, 11734), (43, 11740), (50, 11788), (51, 11791), (52, 11794), (68, 11860), (69, 11872), (78, 11959), (80, 11971),

Gene: Skinny_22 Start: 11871, Stop: 12275, Start Num: 12

Candidate Starts for Skinny_22:

(Start: 12 @11871 has 27 MA's), (29, 11964), (32, 11985), (33, 11991), (44, 12036), (53, 12096), (68, 12162),

Gene: SlimJimmy_20 Start: 11870, Stop: 12274, Start Num: 12

Candidate Starts for SlimJimmy_20:

(Start: 12 @11870 has 27 MA's), (29, 11963), (32, 11984), (33, 11990), (44, 12035), (53, 12095), (68, 12161),

Gene: Syleon_20 Start: 11545, Stop: 11910, Start Num: 20

Candidate Starts for Syleon_20:

(Start: 20 @11545 has 6 MA's), (27, 11581), (31, 11608), (33, 11620), (41, 11650), (42, 11656), (43, 11662), (50, 11710), (51, 11713), (52, 11716), (68, 11782), (69, 11794), (78, 11881), (80, 11893),

Gene: TpudiCK_22 Start: 11870, Stop: 12274, Start Num: 12

Candidate Starts for TpudiCK_22:

(Start: 12 @11870 has 27 MA's), (29, 11963), (32, 11984), (33, 11990), (44, 12035), (53, 12095), (68, 12161),

Gene: Trax_19 Start: 11277, Stop: 11648, Start Num: 20

Candidate Starts for Trax_19:

(Start: 16 @11262 has 1 MA's), (Start: 20 @11277 has 6 MA's), (23, 11283), (28, 11322), (29, 11325), (31, 11340), (33, 11352), (42, 11388), (65, 11493), (68, 11511), (69, 11523), (70, 11556), (80, 11634),

Gene: TyDawg_21 Start: 11871, Stop: 12275, Start Num: 12

Candidate Starts for TyDawg_21:

(Start: 12 @11871 has 27 MA's), (29, 11964), (32, 11985), (33, 11991), (44, 12036), (53, 12096), (68, 12162),

Gene: Whitty_12 Start: 9006, Stop: 9371, Start Num: 18

Candidate Starts for Whitty_12:

(Start: 12 @8949 has 27 MA's), (Start: 18 @9006 has 7 MA's), (30, 9072), (31, 9084), (44, 9141), (46, 9168), (57, 9213), (58, 9219), (75, 9345),

Gene: Wildcat_33 Start: 14943, Stop: 15338, Start Num: 12

Candidate Starts for Wildcat_33:

(4, 14841), (6, 14856), (7, 14874), (8, 14889), (9, 14910), (Start: 12 @14943 has 27 MA's), (24, 14982), (31, 15039), (33, 15051), (36, 15063), (38, 15072), (54, 15174), (55, 15186), (56, 15192), (77, 15318),

Gene: ZenTime222_12 Start: 9006, Stop: 9371, Start Num: 18

Candidate Starts for ZenTime222_12:

(Start: 12 @8949 has 27 MA's), (Start: 18 @9006 has 7 MA's), (30, 9072), (31, 9084), (44, 9141), (46, 9168), (57, 9213), (58, 9219), (75, 9345),