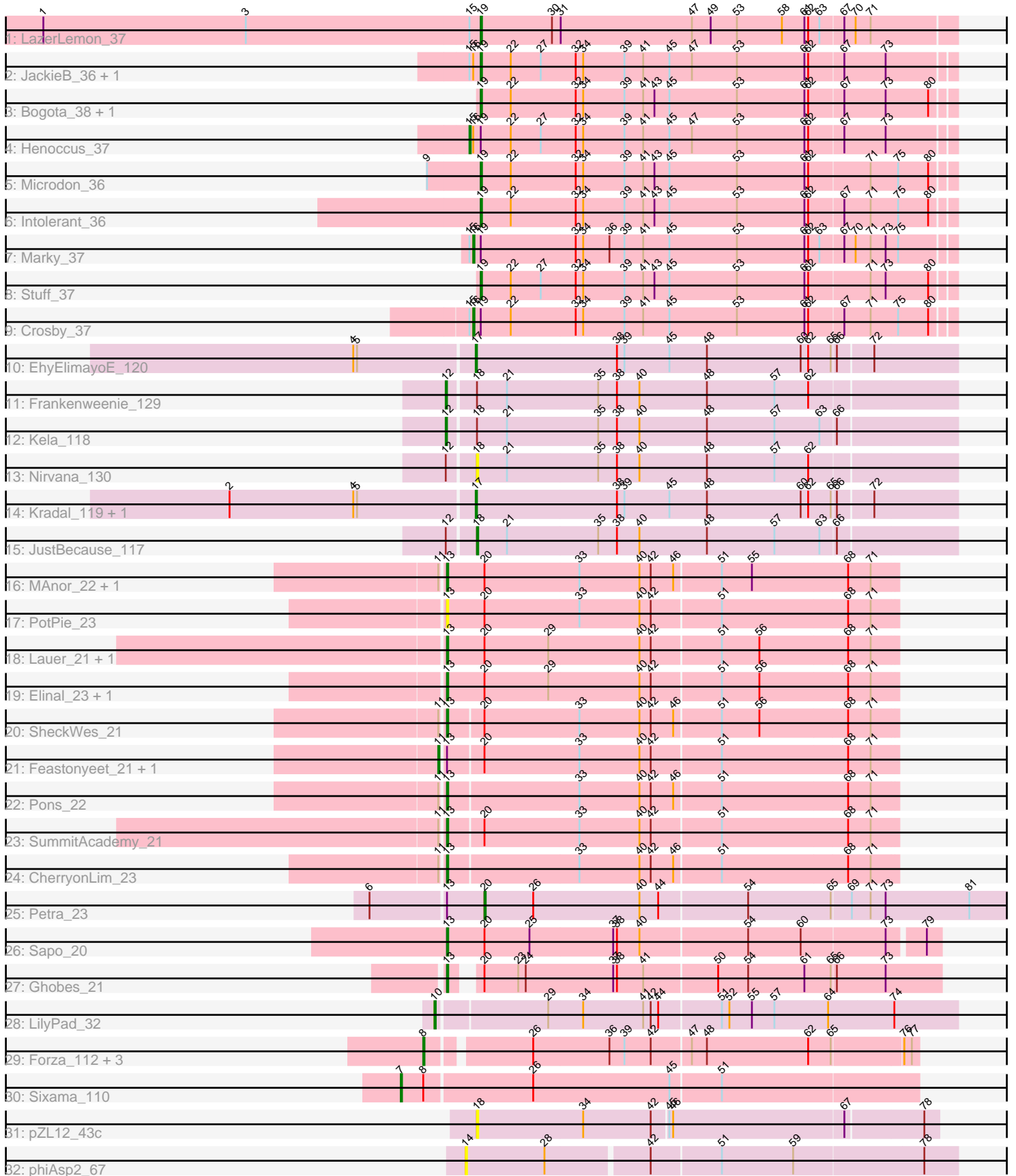


Pham 157996



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 157996 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157996 has 42 members, 6 are drafts.

Phages represented in each track:

- Track 1 : LazerLemon_37
- Track 2 : JackieB_36, Araceli_37
- Track 3 : Bogota_38, UNTPL_38
- Track 4 : Henoccus_37
- Track 5 : Microdon_36
- Track 6 : Intolerant_36
- Track 7 : Marky_37
- Track 8 : Stuff_37
- Track 9 : Crosby_37
- Track 10 : EhyElimayoE_120
- Track 11 : Frankenweenie_129
- Track 12 : Kela_118
- Track 13 : Nirvana_130
- Track 14 : Kradal_119, Satis_119
- Track 15 : JustBecause_117
- Track 16 : MAnor_22, Mayweather_23
- Track 17 : PotPie_23
- Track 18 : Lauer_21, Vine_23
- Track 19 : Elinal_23, KayGee_21
- Track 20 : SheckWes_21
- Track 21 : Feastonyeet_21, BigChungus_21
- Track 22 : Pons_22
- Track 23 : SummitAcademy_21
- Track 24 : CherryonLim_23
- Track 25 : Petra_23
- Track 26 : Sapo_20
- Track 27 : Ghobes_21
- Track 28 : LilyPad_32
- Track 29 : Forza_112, BlueNGold_111, Boopy_112, Mareelih_110
- Track 30 : Sixama_110
- Track 31 : pZL12_43c
- Track 32 : phiAsp2_67

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

The start number called the most often in the published annotations is 13, it was called in 10 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- CherryonLim_23, Elinal_23, Ghobes_21, KayGee_21, Lauer_21, MAnor_22, Mayweather_23, Pons_22, PotPie_23, Sapo_20, SheckWes_21, SummitAcademy_21, Vine_23,

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

- BigChungus_21, Feastonyeet_21, Petra_23,

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

- Araceli_37, BlueNGold_111, Bogota_38, Boopy_112, Crosby_37, EhyElimayoE_120, Forza_112, Frankenweenie_129, Henoccus_37, Intolerant_36, JackieB_36, JustBecause_117, Kela_118, Kradal_119, LazerLemon_37, LilyPad_32, Mareelih_110, Marky_37, Microdon_36, Nirvana_130, Satis_119, Sixama_110, Stuff_37, UNTPL_38, pZL12_43c, phiAsp2_67,

Summary by start number:

Start 7:

- Found in 1 of 42 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sixama_110 (DS),

Start 8:

- Found in 5 of 42 (11.9%) of genes in pham
- Manual Annotations of this start: 4 of 36
- Called 80.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_111 (DS), Boopy_112 (DS), Forza_112 (DS), Mareelih_110 (DS),

Start 10:

- Found in 1 of 42 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilyPad_32 (DG1),

Start 11:

- Found in 8 of 42 (19.0%) of genes in pham
- Manual Annotations of this start: 2 of 36
- Called 25.0% of time when present
- Phage (with cluster) where this start called: BigChungus_21 (CT), Feastonyeet_21 (CT),

Start 12:

- Found in 4 of 42 (9.5%) of genes in pham
- Manual Annotations of this start: 2 of 36
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Frankenweenie_129 (BM), Kela_118 (BM),

Start 13:

- Found in 16 of 42 (38.1%) of genes in pham
- Manual Annotations of this start: 10 of 36
- Called 81.2% of time when present
- Phage (with cluster) where this start called: CherryonLim_23 (CT), Elinal_23 (CT), Ghobes_21 (DA), KayGee_21 (CT), Lauer_21 (CT), MAnor_22 (CT), Mayweather_23 (CT), Pons_22 (CT), PotPie_23 (CT), Sapo_20 (DA), SheckWes_21 (CT), SummitAcademy_21 (CT), Vine_23 (CT),

Start 14:

- 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: phiAsp2_67 (singleton),

Start 15:

- Found in 6 of 42 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Henoccus_37 (BH),

Start 16:

- Found in 5 of 42 (11.9%) of genes in pham
- Manual Annotations of this start: 2 of 36
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Crosby_37 (BH), Marky_37 (BH),

Start 17:

- Found in 3 of 42 (7.1%) of genes in pham
- Manual Annotations of this start: 3 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_120 (BM), Kradal_119 (BM), Satis_119 (BM),

Start 18:

- Found in 5 of 42 (11.9%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 60.0% of time when present
- Phage (with cluster) where this start called: JustBecause_117 (BM), Nirvana_130 (BM), pZL12_43c (singleton),

Start 19:

- Found in 11 of 42 (26.2%) of genes in pham
- Manual Annotations of this start: 8 of 36
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Araceli_37 (BH), Bogota_38 (BH), Intolerant_36 (BH), JackieB_36 (BH), LazerLemon_37 (BH), Microdon_36 (BH), Stuff_37 (BH), UNTPL_38 (BH),

Start 20:

- Found in 14 of 42 (33.3%) of genes in pham
- Manual Annotations of this start: 1 of 36

- Called 7.1% of time when present
- Phage (with cluster) where this start called: Petra_23 (CV),

Summary by clusters:

There are 8 clusters represented in this pham: singleton, BM, BH, CV, DG1, DA, DS, CT,

Info for manual annotations of cluster BH:

- Start number 15 was manually annotated 1 time for cluster BH.
- Start number 16 was manually annotated 2 times for cluster BH.
- Start number 19 was manually annotated 8 times for cluster BH.

Info for manual annotations of cluster BM:

- Start number 12 was manually annotated 2 times for cluster BM.
- Start number 17 was manually annotated 3 times for cluster BM.
- Start number 18 was manually annotated 1 time for cluster BM.

Info for manual annotations of cluster CT:

- Start number 11 was manually annotated 2 times for cluster CT.
- Start number 13 was manually annotated 8 times for cluster CT.

Info for manual annotations of cluster CV:

- Start number 20 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DA:

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

Info for manual annotations of cluster DG1:

- Start number 10 was manually annotated 1 time for cluster DG1.

Info for manual annotations of cluster DS:

- Start number 7 was manually annotated 1 time for cluster DS.
- Start number 8 was manually annotated 4 times for cluster DS.

Gene Information:

Gene: Araceli_37 Start: 28758, Stop: 29129, Start Num: 19

Candidate Starts for Araceli_37:

(Start: 15 @28749 has 1 MA's), (Start: 16 @28752 has 2 MA's), (Start: 19 @28758 has 8 MA's), (22, 28782), (27, 28806), (32, 28833), (34, 28839), (39, 28872), (41, 28887), (45, 28908), (47, 28926), (53, 28962), (61, 29016), (62, 29019), (67, 29046), (73, 29079),

Gene: BigChungus_21 Start: 19097, Stop: 19450, Start Num: 11

Candidate Starts for BigChungus_21:

(Start: 11 @19097 has 2 MA's), (Start: 13 @19100 has 10 MA's), (Start: 20 @19127 has 1 MA's), (33, 19202), (40, 19250), (42, 19259), (51, 19313), (68, 19412), (71, 19430),

Gene: BlueNGold_111 Start: 69226, Stop: 69600, Start Num: 8

Candidate Starts for BlueNGold_111:

(Start: 8 @69226 has 4 MA's), (26, 69301), (36, 69361), (39, 69373), (42, 69394), (47, 69424), (48, 69436), (62, 69517), (65, 69535), (76, 69589), (77, 69595),

Gene: Bogota_38 Start: 29151, Stop: 29522, Start Num: 19

Candidate Starts for Bogota_38:

(Start: 19 @29151 has 8 MA's), (22, 29175), (32, 29226), (34, 29232), (39, 29265), (41, 29280), (43, 29289), (45, 29301), (53, 29355), (61, 29409), (62, 29412), (67, 29439), (73, 29472), (80, 29505),

Gene: Boopy_112 Start: 69238, Stop: 69612, Start Num: 8

Candidate Starts for Boopy_112:

(Start: 8 @69238 has 4 MA's), (26, 69313), (36, 69373), (39, 69385), (42, 69406), (47, 69436), (48, 69448), (62, 69529), (65, 69547), (76, 69601), (77, 69607),

Gene: CherryonLim_23 Start: 19809, Stop: 20159, Start Num: 13

Candidate Starts for CherryonLim_23:

(Start: 11 @19806 has 2 MA's), (Start: 13 @19809 has 10 MA's), (33, 19911), (40, 19959), (42, 19968), (46, 19986), (51, 20022), (68, 20121), (71, 20139),

Gene: Crosby_37 Start: 28891, Stop: 29268, Start Num: 16

Candidate Starts for Crosby_37:

(Start: 15 @28888 has 1 MA's), (Start: 16 @28891 has 2 MA's), (Start: 19 @28897 has 8 MA's), (22, 28921), (32, 28972), (34, 28978), (39, 29011), (41, 29026), (45, 29047), (53, 29101), (61, 29155), (62, 29158), (67, 29185), (71, 29206), (75, 29227), (80, 29251),

Gene: EhyElimayoE_120 Start: 78634, Stop: 79011, Start Num: 17

Candidate Starts for EhyElimayoE_120:

(4, 78541), (5, 78544), (Start: 17 @78634 has 3 MA's), (38, 78745), (39, 78751), (45, 78787), (48, 78817), (60, 78892), (62, 78898), (65, 78916), (66, 78919), (72, 78946),

Gene: Elinal_23 Start: 19050, Stop: 19403, Start Num: 13

Candidate Starts for Elinal_23:

(Start: 13 @19050 has 10 MA's), (Start: 20 @19080 has 1 MA's), (29, 19131), (40, 19203), (42, 19212), (51, 19266), (56, 19296), (68, 19365), (71, 19383),

Gene: Feastonyeet_21 Start: 19097, Stop: 19450, Start Num: 11

Candidate Starts for Feastonyeet_21:

(Start: 11 @19097 has 2 MA's), (Start: 13 @19100 has 10 MA's), (Start: 20 @19127 has 1 MA's), (33, 19202), (40, 19250), (42, 19259), (51, 19313), (68, 19412), (71, 19430),

Gene: Forza_112 Start: 69154, Stop: 69528, Start Num: 8

Candidate Starts for Forza_112:

(Start: 8 @69154 has 4 MA's), (26, 69229), (36, 69289), (39, 69301), (42, 69322), (47, 69352), (48, 69364), (62, 69445), (65, 69463), (76, 69517), (77, 69523),

Gene: Frankenweenie_129 Start: 83529, Stop: 83927, Start Num: 12

Candidate Starts for Frankenweenie_129:

(Start: 12 @83529 has 2 MA's), (Start: 18 @83550 has 1 MA's), (21, 83574), (35, 83646), (38, 83661), (40, 83679), (48, 83733), (57, 83787), (62, 83814),

Gene: Ghobes_21 Start: 18551, Stop: 18925, Start Num: 13

Candidate Starts for Ghobes_21:

(Start: 13 @18551 has 10 MA's), (Start: 20 @18566 has 1 MA's), (23, 18593), (24, 18599), (37, 18668), (38, 18671), (41, 18692), (50, 18749), (54, 18773), (61, 18818), (65, 18839), (66, 18842), (73,

18881),

Gene: Henococcus_37 Start: 28765, Stop: 29145, Start Num: 15

Candidate Starts for Henococcus_37:

(Start: 15 @28765 has 1 MA's), (Start: 16 @28768 has 2 MA's), (Start: 19 @28774 has 8 MA's), (22, 28798), (27, 28822), (32, 28849), (34, 28855), (39, 28888), (41, 28903), (45, 28924), (47, 28942), (53, 28978), (61, 29032), (62, 29035), (67, 29062), (73, 29095),

Gene: Intolerant_36 Start: 28786, Stop: 29157, Start Num: 19

Candidate Starts for Intolerant_36:

(Start: 19 @28786 has 8 MA's), (22, 28810), (32, 28861), (34, 28867), (39, 28900), (41, 28915), (43, 28924), (45, 28936), (53, 28990), (61, 29044), (62, 29047), (67, 29074), (71, 29095), (75, 29116), (80, 29140),

Gene: JackieB_36 Start: 28612, Stop: 28983, Start Num: 19

Candidate Starts for JackieB_36:

(Start: 15 @28603 has 1 MA's), (Start: 16 @28606 has 2 MA's), (Start: 19 @28612 has 8 MA's), (22, 28636), (27, 28660), (32, 28687), (34, 28693), (39, 28726), (41, 28741), (45, 28762), (47, 28780), (53, 28816), (61, 28870), (62, 28873), (67, 28900), (73, 28933),

Gene: JustBecause_117 Start: 77702, Stop: 78079, Start Num: 18

Candidate Starts for JustBecause_117:

(Start: 12 @77681 has 2 MA's), (Start: 18 @77702 has 1 MA's), (21, 77726), (35, 77798), (38, 77813), (40, 77831), (48, 77885), (57, 77939), (63, 77975), (66, 77987),

Gene: KayGee_21 Start: 19050, Stop: 19403, Start Num: 13

Candidate Starts for KayGee_21:

(Start: 13 @19050 has 10 MA's), (Start: 20 @19080 has 1 MA's), (29, 19131), (40, 19203), (42, 19212), (51, 19266), (56, 19296), (68, 19365), (71, 19383),

Gene: Kela_118 Start: 77561, Stop: 77959, Start Num: 12

Candidate Starts for Kela_118:

(Start: 12 @77561 has 2 MA's), (Start: 18 @77582 has 1 MA's), (21, 77606), (35, 77678), (38, 77693), (40, 77711), (48, 77765), (57, 77819), (63, 77855), (66, 77867),

Gene: Kradal_119 Start: 78631, Stop: 79008, Start Num: 17

Candidate Starts for Kradal_119:

(2, 78439), (4, 78538), (5, 78541), (Start: 17 @78631 has 3 MA's), (38, 78742), (39, 78748), (45, 78784), (48, 78814), (60, 78889), (62, 78895), (65, 78913), (66, 78916), (72, 78943),

Gene: Lauer_21 Start: 19099, Stop: 19452, Start Num: 13

Candidate Starts for Lauer_21:

(Start: 13 @19099 has 10 MA's), (Start: 20 @19129 has 1 MA's), (29, 19180), (40, 19252), (42, 19261), (51, 19315), (56, 19345), (68, 19414), (71, 19432),

Gene: LazerLemon_37 Start: 29273, Stop: 29647, Start Num: 19

Candidate Starts for LazerLemon_37:

(1, 28925), (3, 29087), (Start: 15 @29264 has 1 MA's), (Start: 19 @29273 has 8 MA's), (30, 29330), (31, 29336), (47, 29441), (49, 29456), (53, 29477), (58, 29513), (61, 29531), (62, 29534), (63, 29543), (67, 29561), (70, 29570), (71, 29582),

Gene: LilyPad_32 Start: 27930, Stop: 28334, Start Num: 10

Candidate Starts for LilyPad_32:

(Start: 10 @27930 has 1 MA's), (29, 28014), (34, 28041), (41, 28089), (42, 28095), (44, 28101), (51, 28149), (52, 28155), (55, 28173), (57, 28191), (64, 28233), (74, 28284),

Gene: MAnor_22 Start: 19067, Stop: 19420, Start Num: 13

Candidate Starts for MAnor_22:

(Start: 11 @19064 has 2 MA's), (Start: 13 @19067 has 10 MA's), (Start: 20 @19097 has 1 MA's), (33, 19172), (40, 19220), (42, 19229), (46, 19247), (51, 19283), (55, 19307), (68, 19382), (71, 19400),

Gene: Mareelih_110 Start: 68656, Stop: 69030, Start Num: 8

Candidate Starts for Mareelih_110:

(Start: 8 @68656 has 4 MA's), (26, 68731), (36, 68791), (39, 68803), (42, 68824), (47, 68854), (48, 68866), (62, 68947), (65, 68965), (76, 69019), (77, 69025),

Gene: Marky_37 Start: 28616, Stop: 28993, Start Num: 16

Candidate Starts for Marky_37:

(Start: 15 @28613 has 1 MA's), (Start: 16 @28616 has 2 MA's), (Start: 19 @28622 has 8 MA's), (32, 28697), (34, 28703), (36, 28724), (39, 28736), (41, 28751), (45, 28772), (53, 28826), (61, 28880), (62, 28883), (63, 28892), (67, 28910), (70, 28919), (71, 28931), (73, 28943), (75, 28952),

Gene: Mayweather_23 Start: 19682, Stop: 20035, Start Num: 13

Candidate Starts for Mayweather_23:

(Start: 11 @19679 has 2 MA's), (Start: 13 @19682 has 10 MA's), (Start: 20 @19712 has 1 MA's), (33, 19787), (40, 19835), (42, 19844), (46, 19862), (51, 19898), (55, 19922), (68, 19997), (71, 20015),

Gene: Microdon_36 Start: 28594, Stop: 28965, Start Num: 19

Candidate Starts for Microdon_36:

(9, 28552), (Start: 19 @28594 has 8 MA's), (22, 28618), (32, 28669), (34, 28675), (39, 28708), (41, 28723), (43, 28732), (45, 28744), (53, 28798), (61, 28852), (62, 28855), (71, 28903), (75, 28924), (80, 28948),

Gene: Nirvana_130 Start: 81947, Stop: 82324, Start Num: 18

Candidate Starts for Nirvana_130:

(Start: 12 @81926 has 2 MA's), (Start: 18 @81947 has 1 MA's), (21, 81971), (35, 82043), (38, 82058), (40, 82076), (48, 82130), (57, 82184), (62, 82211),

Gene: Petra_23 Start: 19911, Stop: 20354, Start Num: 20

Candidate Starts for Petra_23:

(6, 19824), (Start: 13 @19881 has 10 MA's), (Start: 20 @19911 has 1 MA's), (26, 19950), (40, 20034), (44, 20049), (54, 20118), (65, 20184), (69, 20199), (71, 20214), (73, 20226), (81, 20292),

Gene: Pons_22 Start: 19057, Stop: 19407, Start Num: 13

Candidate Starts for Pons_22:

(Start: 11 @19054 has 2 MA's), (Start: 13 @19057 has 10 MA's), (33, 19159), (40, 19207), (42, 19216), (46, 19234), (51, 19270), (68, 19369), (71, 19387),

Gene: PotPie_23 Start: 19916, Stop: 20269, Start Num: 13

Candidate Starts for PotPie_23:

(Start: 13 @19916 has 10 MA's), (Start: 20 @19946 has 1 MA's), (33, 20021), (40, 20069), (42, 20078), (51, 20132), (68, 20231), (71, 20249),

Gene: Sapo_20 Start: 18495, Stop: 18878, Start Num: 13

Candidate Starts for Sapo_20:

(Start: 13 @18495 has 10 MA's), (Start: 20 @18525 has 1 MA's), (25, 18561), (37, 18627), (38, 18630), (40, 18648), (54, 18732), (60, 18774), (73, 18840), (79, 18867),

Gene: Satis_119 Start: 78627, Stop: 79004, Start Num: 17

Candidate Starts for Satis_119:

(2, 78435), (4, 78534), (5, 78537), (Start: 17 @78627 has 3 MA's), (38, 78738), (39, 78744), (45, 78780), (48, 78810), (60, 78885), (62, 78891), (65, 78909), (66, 78912), (72, 78939),

Gene: SheckWes_21 Start: 19054, Stop: 19404, Start Num: 13

Candidate Starts for SheckWes_21:

(Start: 11 @19051 has 2 MA's), (Start: 13 @19054 has 10 MA's), (Start: 20 @19081 has 1 MA's), (33, 19156), (40, 19204), (42, 19213), (46, 19231), (51, 19267), (56, 19297), (68, 19366), (71, 19384),

Gene: Sixama_110 Start: 68663, Stop: 69067, Start Num: 7

Candidate Starts for Sixama_110:

(Start: 7 @68663 has 1 MA's), (Start: 8 @68681 has 4 MA's), (26, 68765), (45, 68873), (51, 68912),

Gene: Stuff_37 Start: 29069, Stop: 29440, Start Num: 19

Candidate Starts for Stuff_37:

(Start: 19 @29069 has 8 MA's), (22, 29093), (27, 29117), (32, 29144), (34, 29150), (39, 29183), (41, 29198), (43, 29207), (45, 29219), (53, 29273), (61, 29327), (62, 29330), (71, 29378), (73, 29390), (80, 29423),

Gene: SummitAcademy_21 Start: 19131, Stop: 19481, Start Num: 13

Candidate Starts for SummitAcademy_21:

(Start: 11 @19128 has 2 MA's), (Start: 13 @19131 has 10 MA's), (Start: 20 @19158 has 1 MA's), (33, 19233), (40, 19281), (42, 19290), (51, 19344), (68, 19443), (71, 19461),

Gene: UNTPL_38 Start: 29132, Stop: 29503, Start Num: 19

Candidate Starts for UNTPL_38:

(Start: 19 @29132 has 8 MA's), (22, 29156), (32, 29207), (34, 29213), (39, 29246), (41, 29261), (43, 29270), (45, 29282), (53, 29336), (61, 29390), (62, 29393), (67, 29420), (73, 29453), (80, 29486),

Gene: Vine_23 Start: 20063, Stop: 20416, Start Num: 13

Candidate Starts for Vine_23:

(Start: 13 @20063 has 10 MA's), (Start: 20 @20093 has 1 MA's), (29, 20144), (40, 20216), (42, 20225), (51, 20279), (56, 20309), (68, 20378), (71, 20396),

Gene: pZL12_43c Start: 31467, Stop: 31108, Start Num: 18

Candidate Starts for pZL12_43c:

(Start: 18 @31467 has 1 MA's), (34, 31383), (42, 31329), (45, 31317), (46, 31314), (67, 31179), (78, 31119),

Gene: phiAsp2_67 Start: 54403, Stop: 54783, Start Num: 14

Candidate Starts for phiAsp2_67:

(14, 54403), (28, 54466), (42, 54544), (51, 54598), (59, 54655), (78, 54757),