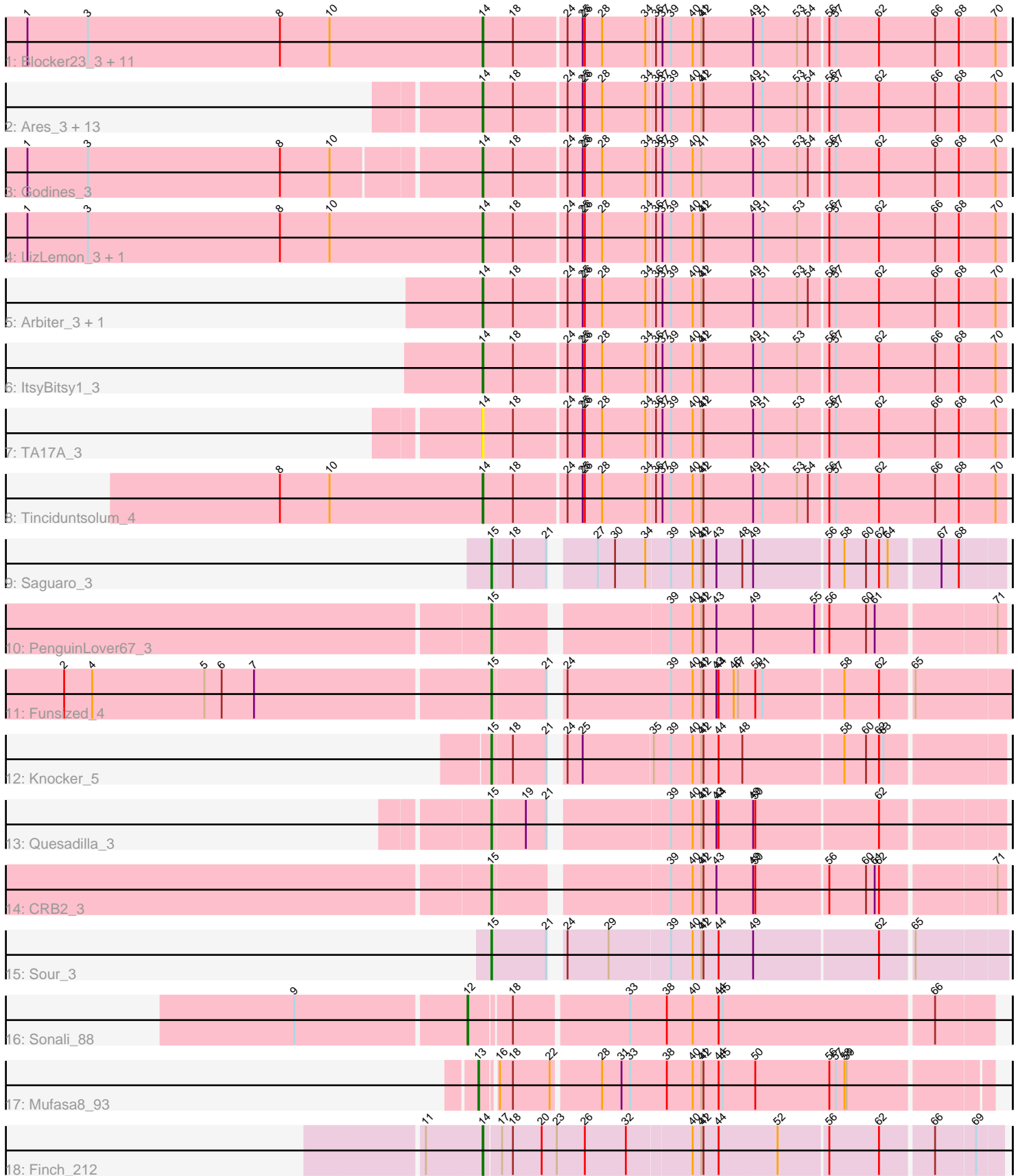


Pham 1955



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 1955 Report

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

Pham number 1955 has 44 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Blocker23_3, Rosebush_3, Eaglehorse_3, Boyle_3, FrenchFry_3, Coffee_3, Rhinoforte_3, Glass_3, Faze9_3, Brownie5_3, Kaleb_3, West99_3
- Track 2 : Ares_3, Opia_3, Allegro_3, Lephleur_3, Hedgerow_3, Sabella_3, Kheth_3, Tres_3, Calamitous_3, Bananafish_3, Holeinone_3, MasterPo_3, Laurie_3, Phantasmagoria_3
- Track 3 : Godines_3
- Track 4 : LizLemon_3, Lars_3
- Track 5 : Arbiter_3, Qyrzula_3
- Track 6 : ItsyBitsy1_3
- Track 7 : TA17A_3
- Track 8 : Tinciduntolum_4
- Track 9 : Saguaro_3
- Track 10 : PenguinLover67_3
- Track 11 : Funsized_4
- Track 12 : Knocker_5
- Track 13 : Quesadilla_3
- Track 14 : CRB2_3
- Track 15 : Sour_3
- Track 16 : Sonali_88
- Track 17 : Mufasa8_93
- Track 18 : Finch_212

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

The start number called the most often in the published annotations is 14, it was called in 33 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Allegro_3, Arbiter_3, Ares_3, Bananafish_3, Blocker23_3, Boyle_3, Brownie5_3, Calamitous_3, Coffee_3, Eaglehorse_3, Faze9_3, Finch_212, FrenchFry_3, Glass_3, Godines_3, Hedgerow_3, Holeinone_3, ItsyBitsy1_3, Kaleb_3, Kheth_3, Lars_3, Laurie_3, Lephleur_3, LizLemon_3, MasterPo_3, Opia_3, Phantasmagoria_3, Qyrzula_3, Rhinoforte_3, Rosebush_3, Sabella_3, TA17A_3, Tinciduntolum_4, Tres_3, West99_3,

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

-

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

- CRB2_3, Funsized_4, Knocker_5, Mufasa8_93, PenguinLover67_3, Quesadilla_3, Saguaro_3, Sonali_88, Sour_3,

Summary by start number:

Start 12:

- Found in 1 of 44 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sonali_88 (FG),

Start 13:

- Found in 1 of 44 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mufasa8_93 (FG),

Start 14:

- Found in 35 of 44 (79.5%) of genes in pham
- Manual Annotations of this start: 33 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Allegro_3 (B2), Arbiter_3 (B2), Ares_3 (B2), Bananafish_3 (B2), Blocker23_3 (B2), Boyle_3 (B2), Brownie5_3 (B2), Calamitous_3 (B2), Coffee_3 (B2), Eaglehorse_3 (B2), Faze9_3 (B2), Finch_212 (singleton), FrenchFry_3 (B2), Glass_3 (B2), Godines_3 (B2), Hedgerow_3 (B2), Holeinone_3 (B2), ItsyBitsy1_3 (B2), Kaleb_3 (B2), Kheth_3 (B2), Lars_3 (B2), Laurie_3 (B2), Lephleur_3 (B2), LizLemon_3 (B2), MasterPo_3 (B2), Opia_3 (B2), Phantasmagoria_3 (B2), Qyrzula_3 (B2), Rhinoforte_3 (B2), Rosebush_3 (B2), Sabella_3 (B2), TA17A_3 (B2), Tinciduntolum_4 (B2), Tres_3 (B2), West99_3 (B2),

Start 15:

- Found in 7 of 44 (15.9%) of genes in pham
- Manual Annotations of this start: 7 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CRB2_3 (B9), Funsized_4 (B9), Knocker_5 (B9), PenguinLover67_3 (B9), Quesadilla_3 (B9), Saguaro_3 (B7), Sour_3 (DR),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, B7, B2, FG, DR, B9,

Info for manual annotations of cluster B2:

- Start number 14 was manually annotated 32 times for cluster B2.

Info for manual annotations of cluster B7:

- Start number 15 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B9:

- Start number 15 was manually annotated 5 times for cluster B9.

Info for manual annotations of cluster DR:

- Start number 15 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster FG:

- Start number 12 was manually annotated 1 time for cluster FG.
- Start number 13 was manually annotated 1 time for cluster FG.

Gene Information:

Gene: Allegro_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Allegro_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Arbiter_3 Start: 1916, Stop: 2623, Start Num: 14

Candidate Starts for Arbiter_3:

(Start: 14 @1916 has 33 MA's), (18, 1958), (24, 2027), (25, 2048), (26, 2051), (28, 2075), (34, 2135), (36, 2147), (37, 2156), (39, 2168), (40, 2198), (41, 2210), (42, 2213), (49, 2282), (51, 2294), (53, 2342), (54, 2357), (56, 2381), (57, 2390), (62, 2450), (66, 2528), (68, 2561), (70, 2609),

Gene: Ares_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Ares_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Bananafish_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Bananafish_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Blocker23_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for Blocker23_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: Boyle_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for Boyle_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: Brownie5_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for Brownie5_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: CRB2_3 Start: 1616, Stop: 2278, Start Num: 15

Candidate Starts for CRB2_3:

(Start: 15 @1616 has 7 MA's), (39, 1835), (40, 1865), (41, 1877), (42, 1880), (43, 1898), (49, 1949), (50, 1952), (56, 2048), (60, 2099), (61, 2111), (62, 2117), (71, 2267),

Gene: Calamitous_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Calamitous_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Coffee_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for Coffee_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: Eaglehorse_3 Start: 1844, Stop: 2551, Start Num: 14

Candidate Starts for Eaglehorse_3:

(1, 1211), (3, 1295), (8, 1562), (10, 1631), (Start: 14 @1844 has 33 MA's), (18, 1886), (24, 1955), (25, 1976), (26, 1979), (28, 2003), (34, 2063), (36, 2075), (37, 2084), (39, 2096), (40, 2126), (41, 2138), (42, 2141), (49, 2210), (51, 2222), (53, 2270), (54, 2285), (56, 2309), (57, 2318), (62, 2378), (66, 2456), (68, 2489), (70, 2537),

Gene: Faze9_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for Faze9_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: Finch_212 Start: 123885, Stop: 124574, Start Num: 14

Candidate Starts for Finch_212:

(11, 123807), (Start: 14 @123885 has 33 MA's), (17, 123906), (18, 123921), (20, 123960), (23, 123981), (26, 124020), (32, 124077), (40, 124164), (41, 124176), (42, 124179), (44, 124200), (52, 124281), (56, 124347), (62, 124416), (66, 124485), (69, 124539),

Gene: FrenchFry_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for FrenchFry_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: Funsized_4 Start: 2562, Stop: 3239, Start Num: 15

Candidate Starts for Funsized_4:

(2, 1980), (4, 2019), (5, 2175), (6, 2199), (7, 2244), (Start: 15 @2562 has 7 MA's), (21, 2634), (24, 2640), (39, 2784), (40, 2814), (41, 2826), (42, 2829), (43, 2847), (44, 2850), (46, 2871), (47, 2877), (50, 2901), (51, 2910), (58, 3018), (62, 3066), (65, 3108),

Gene: Glass_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for Glass_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: Godines_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Godines_3:

(1, 1211), (3, 1295), (8, 1562), (10, 1631), (Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Hedgerow_3 Start: 1925, Stop: 2632, Start Num: 14

Candidate Starts for Hedgerow_3:

(Start: 14 @1925 has 33 MA's), (18, 1967), (24, 2036), (25, 2057), (26, 2060), (28, 2084), (34, 2144), (36, 2156), (37, 2165), (39, 2177), (40, 2207), (41, 2219), (42, 2222), (49, 2291), (51, 2303), (53, 2351), (54, 2366), (56, 2390), (57, 2399), (62, 2459), (66, 2537), (68, 2570), (70, 2618),

Gene: Holeinone_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Holeinone_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: ItsyBitsy1_3 Start: 1817, Stop: 2524, Start Num: 14

Candidate Starts for ItsyBitsy1_3:

(Start: 14 @1817 has 33 MA's), (18, 1859), (24, 1928), (25, 1949), (26, 1952), (28, 1976), (34, 2036), (36, 2048), (37, 2057), (39, 2069), (40, 2099), (41, 2111), (42, 2114), (49, 2183), (51, 2195), (53, 2243), (56, 2282), (57, 2291), (62, 2351), (66, 2429), (68, 2462), (70, 2510),

Gene: Kaleb_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for Kaleb_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: Kheth_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Kheth_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Knocker_5 Start: 3211, Stop: 3876, Start Num: 15

Candidate Starts for Knocker_5:

(Start: 15 @3211 has 7 MA's), (18, 3238), (21, 3283), (24, 3289), (25, 3310), (35, 3406), (39, 3430), (40, 3460), (41, 3472), (42, 3475), (44, 3496), (48, 3529), (58, 3664), (60, 3694), (62, 3712), (63,

3718),

Gene: Lars_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for Lars_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: Laurie_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Laurie_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Lephleur_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Lephleur_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: LizLemon_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for LizLemon_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: MasterPo_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for MasterPo_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Mufasa8_93 Start: 54254, Stop: 54925, Start Num: 13

Candidate Starts for Mufasa8_93:

(Start: 13 @54254 has 1 MA's), (16, 54272), (18, 54290), (22, 54338), (28, 54401), (31, 54428), (33, 54440), (38, 54491), (40, 54527), (41, 54539), (42, 54542), (44, 54563), (45, 54569), (50, 54614), (56, 54716), (57, 54725), (58, 54737), (59, 54740),

Gene: Opia_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Opia_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: PenguinLover67_3 Start: 1616, Stop: 2278, Start Num: 15

Candidate Starts for PenguinLover67_3:

(Start: 15 @1616 has 7 MA's), (39, 1835), (40, 1865), (41, 1877), (42, 1880), (43, 1898), (49, 1949), (55, 2033), (56, 2048), (60, 2099), (61, 2111), (71, 2267),

Gene: Phantasmagoria_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Phantasmagoria_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Quesadilla_3 Start: 1631, Stop: 2293, Start Num: 15

Candidate Starts for Quesadilla_3:

(Start: 15 @1631 has 7 MA's), (19, 1676), (21, 1703), (39, 1850), (40, 1880), (41, 1892), (42, 1895), (43, 1913), (44, 1916), (49, 1964), (50, 1967), (62, 2132),

Gene: Qyrzula_3 Start: 1916, Stop: 2623, Start Num: 14

Candidate Starts for Qyrzula_3:

(Start: 14 @1916 has 33 MA's), (18, 1958), (24, 2027), (25, 2048), (26, 2051), (28, 2075), (34, 2135), (36, 2147), (37, 2156), (39, 2168), (40, 2198), (41, 2210), (42, 2213), (49, 2282), (51, 2294), (53, 2342), (54, 2357), (56, 2381), (57, 2390), (62, 2450), (66, 2528), (68, 2561), (70, 2609),

Gene: Rhinoforte_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for Rhinoforte_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: Rosebush_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for Rosebush_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),

Gene: Sabella_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Sabella_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Saguaro_3 Start: 1820, Stop: 2482, Start Num: 15

Candidate Starts for Saguaro_3:

(Start: 15 @1820 has 7 MA's), (18, 1847), (21, 1892), (27, 1940), (30, 1964), (34, 2006), (39, 2039), (40, 2069), (41, 2081), (42, 2084), (43, 2102), (48, 2138), (49, 2153), (56, 2252), (58, 2273), (60, 2303), (62, 2321), (64, 2333), (67, 2399), (68, 2423),

Gene: Sonali_88 Start: 54953, Stop: 55648, Start Num: 12

Candidate Starts for Sonali_88:

(9, 54722), (Start: 12 @54953 has 1 MA's), (18, 55007), (33, 55157), (38, 55208), (40, 55244), (44, 55280), (45, 55286), (66, 55571),

Gene: Sour_3 Start: 1682, Stop: 2350, Start Num: 15

Candidate Starts for Sour_3:

(Start: 15 @1682 has 7 MA's), (21, 1757), (24, 1763), (29, 1820), (39, 1904), (40, 1934), (41, 1946), (42, 1949), (44, 1970), (49, 2018), (62, 2186), (65, 2228),

Gene: TA17A_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for TA17A_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: Tinciduntolum_4 Start: 1942, Stop: 2649, Start Num: 14

Candidate Starts for Tinciduntolum_4:

(8, 1660), (10, 1729), (Start: 14 @1942 has 33 MA's), (18, 1984), (24, 2053), (25, 2074), (26, 2077), (28, 2101), (34, 2161), (36, 2173), (37, 2182), (39, 2194), (40, 2224), (41, 2236), (42, 2239), (49, 2308), (51, 2320), (53, 2368), (54, 2383), (56, 2407), (57, 2416), (62, 2476), (66, 2554), (68, 2587), (70, 2635),

Gene: Tres_3 Start: 1826, Stop: 2533, Start Num: 14

Candidate Starts for Tres_3:

(Start: 14 @1826 has 33 MA's), (18, 1868), (24, 1937), (25, 1958), (26, 1961), (28, 1985), (34, 2045), (36, 2057), (37, 2066), (39, 2078), (40, 2108), (41, 2120), (42, 2123), (49, 2192), (51, 2204), (53, 2252), (54, 2267), (56, 2291), (57, 2300), (62, 2360), (66, 2438), (68, 2471), (70, 2519),

Gene: West99_3 Start: 1943, Stop: 2650, Start Num: 14

Candidate Starts for West99_3:

(1, 1310), (3, 1394), (8, 1661), (10, 1730), (Start: 14 @1943 has 33 MA's), (18, 1985), (24, 2054), (25, 2075), (26, 2078), (28, 2102), (34, 2162), (36, 2174), (37, 2183), (39, 2195), (40, 2225), (41, 2237), (42, 2240), (49, 2309), (51, 2321), (53, 2369), (54, 2384), (56, 2408), (57, 2417), (62, 2477), (66, 2555), (68, 2588), (70, 2636),