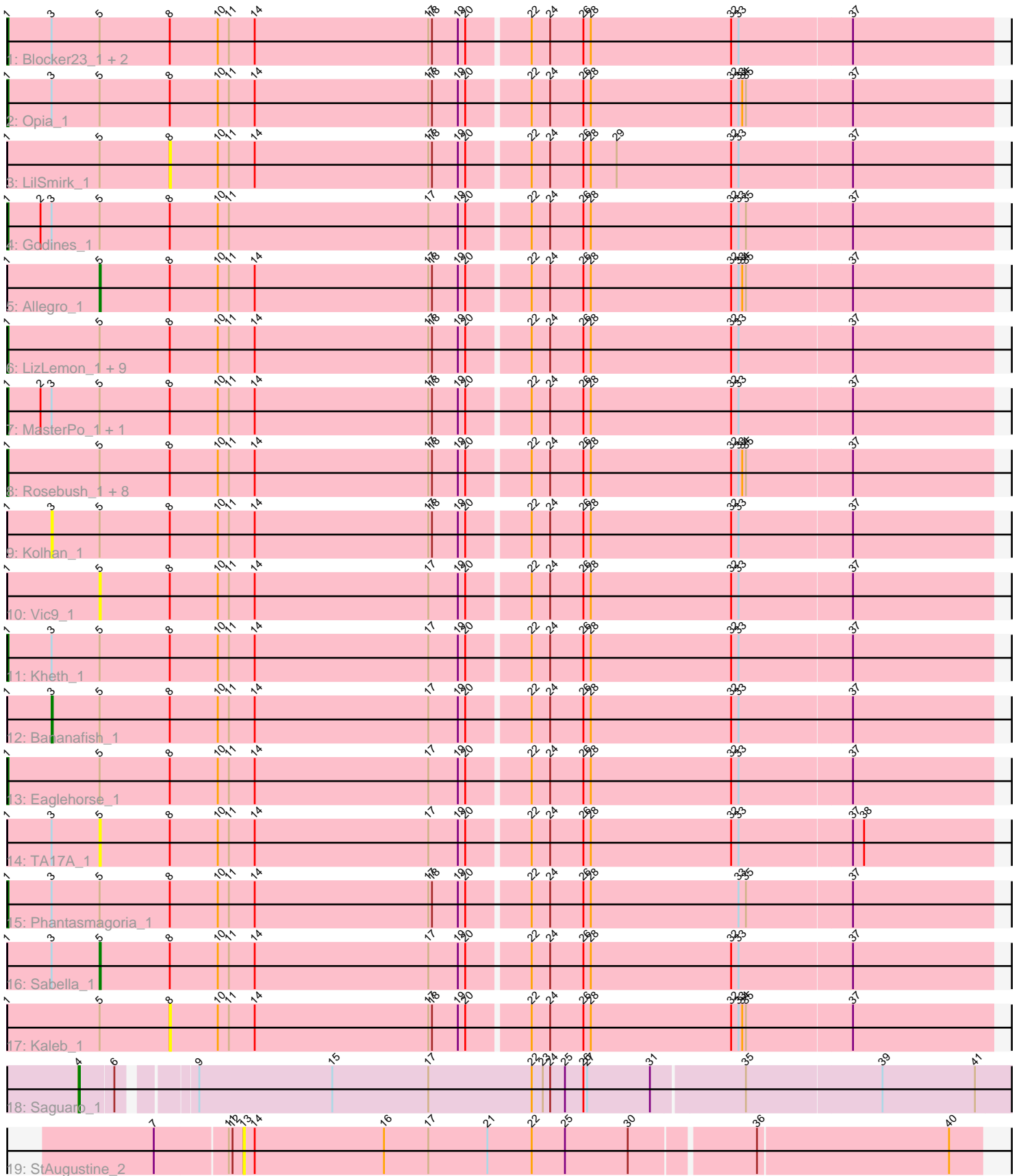


Pham 203110



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 203110 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203110 has 39 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Blocker23_1, Tres_1, Laurie_1
- Track 2 : Opia_1
- Track 3 : LilSmirk_1
- Track 4 : Godines_1
- Track 5 : Allegro_1
- Track 6 : LizLemon_1, Ares_1, Calamitous_1, ItsyBitsy1_1, Qyrzula_1, Arbiter_1, Holeinone_1, Rhinoforte_1, Glass_1, Lars_1
- Track 7 : MasterPo_1, Lephleur_1
- Track 8 : Rosebush_1, Hedgerow_1, Boyle_1, FrenchFry_1, Coffee_1, Tinciduntolum_1, Faze9_1, Brownie5_1, West99_1
- Track 9 : Kolhan_1
- Track 10 : Vic9_1
- Track 11 : Kheth_1
- Track 12 : Bananafish_1
- Track 13 : Eaglehorse_1
- Track 14 : TA17A_1
- Track 15 : Phantasmagoria_1
- Track 16 : Sabella_1
- Track 17 : Kaleb_1
- Track 18 : Saguaro_1
- Track 19 : StAugustine_2

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

The start number called the most often in the published annotations is 1, it was called in 29 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arbiter_1, Ares_1, Blocker23_1, Boyle_1, Brownie5_1, Calamitous_1, Coffee_1, Eaglehorse_1, Faze9_1, FrenchFry_1, Glass_1, Godines_1, Hedgerow_1, Holeinone_1, ItsyBitsy1_1, Kheth_1, Lars_1, Laurie_1, Lephleur_1, LizLemon_1, MasterPo_1, Opia_1, Phantasmagoria_1, Qyrzula_1, Rhinoforte_1, Rosebush_1, Tinciduntolum_1, Tres_1, West99_1,

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

- Allegro_1, Bananafish_1, Kaleb_1, Kolhan_1, LilSmirk_1, Sabella_1, TA17A_1, Vic9_1,

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

- Saguario_1, StAugustine_2,

Summary by start number:

Start 1:

- Found in 37 of 39 (94.9%) of genes in pham
- Manual Annotations of this start: 29 of 33
- Called 78.4% of time when present
- Phage (with cluster) where this start called: Arbiter_1 (B2), Ares_1 (B2), Blocker23_1 (B2), Boyle_1 (B2), Brownie5_1 (B2), Calamitous_1 (B2), Coffee_1 (B2), Eaglehorse_1 (B2), Faze9_1 (B2), FrenchFry_1 (B2), Glass_1 (B2), Godines_1 (B2), Hedgerow_1 (B2), Holeinone_1 (B2), ItsyBitsy1_1 (B2), Kheth_1 (B2), Lars_1 (B2), Laurie_1 (B2), Lephleur_1 (B2), LizLemon_1 (B2), MasterPo_1 (B2), Opia_1 (B2), Phantasmagoria_1 (B2), Qyrzula_1 (B2), Rhinoforte_1 (B2), Rosebush_1 (B2), Tinciduntolum_1 (B2), Tres_1 (B2), West99_1 (B2),

Start 3:

- Found in 13 of 39 (33.3%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Bananafish_1 (B2), Kolhan_1 (B2),

Start 4:

- Found in 1 of 39 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Saguario_1 (B7),

Start 5:

- Found in 37 of 39 (94.9%) of genes in pham
- Manual Annotations of this start: 2 of 33
- Called 10.8% of time when present
- Phage (with cluster) where this start called: Allegro_1 (B2), Sabella_1 (B2), TA17A_1 (B2), Vic9_1 (B2),

Start 8:

- Found in 37 of 39 (94.9%) of genes in pham
- No Manual Annotations of this start.
- Called 5.4% of time when present
- Phage (with cluster) where this start called: Kaleb_1 (B2), LilSmirk_1 (B2),

Start 13:

- Found in 1 of 39 (2.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: StAugustine_2 (singleton),

Summary by clusters:

There are 3 clusters represented in this pham: singleton, B7, B2,

Info for manual annotations of cluster B2:

- Start number 1 was manually annotated 29 times for cluster B2.
- Start number 3 was manually annotated 1 time for cluster B2.
- Start number 5 was manually annotated 2 times for cluster B2.

Info for manual annotations of cluster B7:

- Start number 4 was manually annotated 1 time for cluster B7.

Gene Information:

Gene: Allegro_1 Start: 76, Stop: 792, Start Num: 5

Candidate Starts for Allegro_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: Arbiter_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Arbiter_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Ares_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Ares_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Bananafish_1 Start: 37, Stop: 792, Start Num: 3

Candidate Starts for Bananafish_1:

(Start: 1 @1 has 29 MA's), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Blocker23_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Blocker23_1:

(Start: 1 @1 has 29 MA's), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Boyle_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Boyle_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: Brownie5_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Brownie5_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: Calamitous_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Calamitous_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Coffee_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Coffee_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: Eaglehorse_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Eaglehorse_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Faze9_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Faze9_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: FrenchFry_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for FrenchFry_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: Glass_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Glass_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Godines_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Godines_1:

(Start: 1 @1 has 29 MA's), (2, 28), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (17, 343), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (35, 595), (37, 679),

Gene: Hedgerow_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Hedgerow_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: Holeinone_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Holeinone_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: ItsyBitsy1_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for ItsyBitsy1_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Kaleb_1 Start: 133, Stop: 792, Start Num: 8

Candidate Starts for Kaleb_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: Kheth_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Kheth_1:

(Start: 1 @1 has 29 MA's), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Kolhan_1 Start: 37, Stop: 792, Start Num: 3

Candidate Starts for Kolhan_1:

(Start: 1 @1 has 29 MA's), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Lars_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Lars_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Laurie_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Laurie_1:

(Start: 1 @1 has 29 MA's), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Lephleur_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Lephleur_1:

(Start: 1 @1 has 29 MA's), (2, 28), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: LilSmirk_1 Start: 133, Stop: 792, Start Num: 8

Candidate Starts for LilSmirk_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (29, 490), (32, 583), (33, 589), (37, 679),

Gene: LizLemon_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for LizLemon_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: MasterPo_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for MasterPo_1:

(Start: 1 @1 has 29 MA's), (2, 28), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Opia_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Opia_1:

(Start: 1 @1 has 29 MA's), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: Phantasmagoria_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Phantasmagoria_1:

(Start: 1 @1 has 29 MA's), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (33, 589), (35, 595), (37, 679),

Gene: Qyrzula_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Qyrzula_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Rhinoforte_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Rhinoforte_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Rosebush_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Rosebush_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: Sabella_1 Start: 76, Stop: 792, Start Num: 5

Candidate Starts for Sabella_1:

(Start: 1 @1 has 29 MA's), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Saguaro_1 Start: 1, Stop: 735, Start Num: 4

Candidate Starts for Saguaro_1:

(Start: 4 @1 has 1 MA's), (6, 28), (9, 79), (15, 187), (17, 265), (22, 349), (23, 358), (24, 364), (25, 376), (26, 391), (27, 394), (31, 445), (35, 517), (39, 625), (41, 700),

Gene: StAugustine_2 Start: 428, Stop: 1015, Start Num: 13

Candidate Starts for StAugustine_2:

(7, 359), (11, 416), (12, 419), (13, 428), (14, 437), (16, 542), (17, 578), (21, 626), (22, 662), (25, 689), (30, 740), (36, 836), (40, 989),

Gene: TA17A_1 Start: 76, Stop: 792, Start Num: 5

Candidate Starts for TA17A_1:

(Start: 1 @1 has 29 MA's), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679), (38, 688),

Gene: Tinciduntolum_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Tinciduntolum_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),

Gene: Tres_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for Tres_1:

(Start: 1 @1 has 29 MA's), (Start: 3 @37 has 1 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: Vic9_1 Start: 76, Stop: 792, Start Num: 5

Candidate Starts for Vic9_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (37, 679),

Gene: West99_1 Start: 1, Stop: 792, Start Num: 1

Candidate Starts for West99_1:

(Start: 1 @1 has 29 MA's), (Start: 5 @76 has 2 MA's), (8, 133), (10, 172), (11, 181), (14, 202), (17, 343), (18, 346), (19, 367), (20, 373), (22, 421), (24, 436), (26, 463), (28, 469), (32, 583), (33, 589), (34, 592), (35, 595), (37, 679),