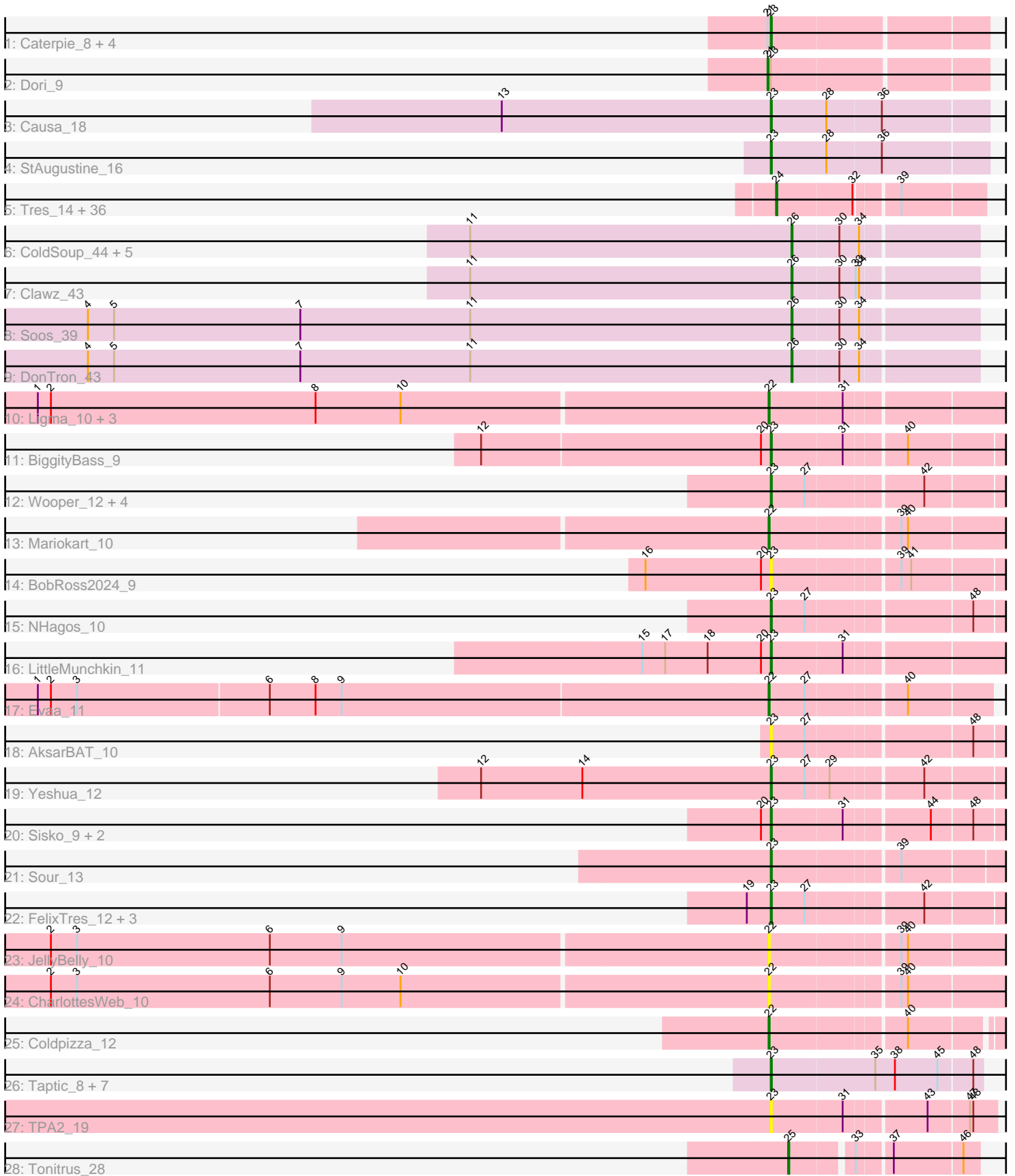


Pham 303273



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 303273 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303273 has 92 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Caterpie_8, JohnLord_9, Mao1_8, Mask_9, Sejanus_9
- Track 2 : Dori_9
- Track 3 : Causa_18
- Track 4 : StAugustine_16
- Track 5 : Tres_14, LilSmirk_14, Godines_14, Brownie5_14, Boyle_14, Arbiter_14, LizLemon_14, Kheth_14, Kolhan_14, Rhinoforte_14, Opia_14, Ares_14, Rosebush_14, Eaglehorse_14, PrinceCharming_14, Glass_14, Allegro_14, Sabella_14, Laurie_14, Faze9_14, MasterPo_14, Lephleur_14, ItsyBitsy1_14, FrenchFry_14, Bananafish_14, Vic9_00014, TA17A_14, Calamitous_14, West99_14, Tinciduntolum_15, Blocker23_14, Lars_14, Holeinone_14, Hedgerow_14, Kaleb_14, Phantasmagoria_14, Coffee_14
- Track 6 : ColdSoup_44, Jollymon_43, Purplicious_41, Sting_42, Amo99_44, KingstonB_43
- Track 7 : Clawz_43
- Track 8 : Soos_39
- Track 9 : DonTron_43
- Track 10 : Ligma_10, Axumite_10, Shatter_10, Fresco_10
- Track 11 : BiggityBass_9
- Track 12 : Wooper_12, MakoManhole_12, CloverMinnie_12, CaiB_12, AnarQue_12
- Track 13 : Mariokart_10
- Track 14 : BobRoss2024_9
- Track 15 : NHagos_10
- Track 16 : LittleMunchkin_11
- Track 17 : Evaa_11
- Track 18 : AksarBAT_10
- Track 19 : Yeshua_12
- Track 20 : Sisko_9, Yago84_9, AnClar_9
- Track 21 : Sour_13
- Track 22 : FelixTres_12, TraderJ_12, MossRose_12, Blackpen_12
- Track 23 : JellyBelly_10
- Track 24 : CharlottesWeb_10
- Track 25 : Coldpizza_12
- Track 26 : Taptic_8, PR_08, Argie_9, D12_08, Megabear_8, GodPhather_9, Jeon_8, Cepens_8
- Track 27 : TPA2_19
- Track 28 : Tonitrus_28

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

The start number called the most often in the published annotations is 24, it was called in 36 of the 78 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Allegro_14, Arbiter_14, Ares_14, Bananafish_14, Blocker23_14, Boyle_14, Brownie5_14, Calamitous_14, Coffee_14, Eaglehorse_14, Faze9_14, FrenchFry_14, Glass_14, Godines_14, Hedgerow_14, Holeinone_14, ItsyBitsy1_14, Kaleb_14, Kheth_14, Kolhan_14, Lars_14, Laurie_14, Lephleur_14, LilSmirk_14, LizLemon_14, MasterPo_14, Opia_14, Phantasmagoria_14, PrinceCharming_14, Rhinoforte_14, Rosebush_14, Sabella_14, TA17A_14, Tinciduntolum_15, Tres_14, Vic9_00014, West99_14,

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

-

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

- AksarBAT_10, Amo99_44, AnClar_9, AnarQue_12, Argie_9, Axumite_10, BiggityBass_9, Blackpen_12, BobRoss2024_9, CaiB_12, Caterpie_8, Causa_18, Cepens_8, CharlottesWeb_10, Clawz_43, CloverMinnie_12, ColdSoup_44, Coldpizza_12, D12_08, DonTron_43, Dori_9, Evaa_11, FelixTres_12, Fresco_10, GodPhather_9, JellyBelly_10, Jeon_8, JohnLord_9, Jollymon_43, KingstonB_43, Ligma_10, LittleMunchkin_11, MakoManhole_12, Mao1_8, Mariokart_10, Mask_9, Megabear_8, MossRose_12, NHagos_10, PR_08, Purplicious_41, Sejanus_9, Shatter_10, Sisko_9, Soos_39, Sour_13, StAugustine_16, Sting_42, TPA2_19, Taptic_8, Tonitrus_28, TraderJ_12, Wooper_12, Yago84_9, Yeshua_12,

Summary by start number:

Start 21:

- Found in 6 of 92 (6.5%) of genes in pham
- Manual Annotations of this start: 1 of 78
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Dori_9 (AD),

Start 22:

- Found in 9 of 92 (9.8%) of genes in pham
- Manual Annotations of this start: 7 of 78
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Axumite_10 (DR), CharlottesWeb_10 (DR), Coldpizza_12 (DR), Evaa_11 (DR), Fresco_10 (DR), JellyBelly_10 (DR), Ligma_10 (DR), Mariokart_10 (DR), Shatter_10 (DR),

Start 23:

- Found in 36 of 92 (39.1%) of genes in pham
- Manual Annotations of this start: 28 of 78
- Called 97.2% of time when present
- Phage (with cluster) where this start called: AksarBAT_10 (DR), AnClar_9 (DR), AnarQue_12 (DR), Argie_9 (W), BiggityBass_9 (DR), Blackpen_12 (DR),

BobRoss2024_9 (DR), CaiB_12 (DR), Caterpie_8 (AD), Causa_18 (AI), Cepens_8 (W), CloverMinnie_12 (DR), D12_08 (W), FelixTres_12 (DR), GodPhather_9 (W), Jeon_8 (W), JohnLord_9 (AD), LittleMunchkin_11 (DR), MakoManhole_12 (DR), Mao1_8 (AD), Mask_9 (AD), Megabear_8 (W), MossRose_12 (DR), NHagos_10 (DR), PR_08 (W), Sejanus_9 (AD), Sisko_9 (DR), Sour_13 (DR), StAugustine_16 (AI), TPA2_19 (singleton), Taptic_8 (W), TraderJ_12 (DR), Wooper_12 (DR), Yago84_9 (DR), Yeshua_12 (DR),

Start 24:

- Found in 37 of 92 (40.2%) of genes in pham
- Manual Annotations of this start: 36 of 78
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Allegro_14 (B2), Arbiter_14 (B2), Ares_14 (B2), Bananafish_14 (B2), Blocker23_14 (B2), Boyle_14 (B2), Brownie5_14 (B2), Calamitous_14 (B2), Coffee_14 (B2), Eaglehorse_14 (B2), Faze9_14 (B2), FrenchFry_14 (B2), Glass_14 (B2), Godines_14 (B2), Hedgerow_14 (B2), Holeinone_14 (B2), ItsyBitsy1_14 (B2), Kaleb_14 (B2), Kheth_14 (B2), Kolhan_14 (B2), Lars_14 (B2), Laurie_14 (B2), Lephleur_14 (B2), LilSmirk_14 (B2), LizLemon_14 (B2), MasterPo_14 (B2), Opia_14 (B2), Phantasmagoria_14 (B2), PrinceCharming_14 (B2), Rhinoforte_14 (B2), Rosebush_14 (B2), Sabella_14 (B2), TA17A_14 (B2), Tinciduntolum_15 (B2), Tres_14 (B2), Vic9_00014 (B2), West99_14 (B2),

Start 25:

- Found in 1 of 92 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 78
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tonitrus_28 (singleton),

Start 26:

- Found in 9 of 92 (9.8%) of genes in pham
- Manual Annotations of this start: 5 of 78
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amo99_44 (CP), Clawz_43 (CP), ColdSoup_44 (CP), DonTron_43 (CP), Jollymon_43 (CP), KingstonB_43 (CP), Purplicious_41 (CP), Soos_39 (CP), Sting_42 (CP),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, B2, AI, W, CP, DR, AD,

Info for manual annotations of cluster AD:

- Start number 21 was manually annotated 1 time for cluster AD.
- Start number 23 was manually annotated 3 times for cluster AD.

Info for manual annotations of cluster AI:

- Start number 23 was manually annotated 2 times for cluster AI.

Info for manual annotations of cluster B2:

- Start number 24 was manually annotated 36 times for cluster B2.

Info for manual annotations of cluster CP:

- Start number 26 was manually annotated 5 times for cluster CP.

Info for manual annotations of cluster DR:

- Start number 22 was manually annotated 7 times for cluster DR.
- Start number 23 was manually annotated 15 times for cluster DR.

Info for manual annotations of cluster W:

- Start number 23 was manually annotated 8 times for cluster W.

Gene Information:

Gene: AksarBAT_10 Start: 9511, Stop: 9714, Start Num: 23

Candidate Starts for AksarBAT_10:

(Start: 23 @9511 has 28 MA's), (27, 9541), (48, 9682),

Gene: Allegro_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Allegro_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: Amo99_44 Start: 22933, Stop: 23091, Start Num: 26

Candidate Starts for Amo99_44:

(11, 22639), (Start: 26 @22933 has 5 MA's), (30, 22972), (34, 22990),

Gene: AnClar_9 Start: 9843, Stop: 10046, Start Num: 23

Candidate Starts for AnClar_9:

(20, 9834), (Start: 23 @9843 has 28 MA's), (31, 9906), (44, 9978), (48, 10014),

Gene: AnarQue_12 Start: 11030, Stop: 11233, Start Num: 23

Candidate Starts for AnarQue_12:

(Start: 23 @11030 has 28 MA's), (27, 11060), (42, 11159),

Gene: Arbiter_14 Start: 12154, Stop: 12327, Start Num: 24

Candidate Starts for Arbiter_14:

(Start: 24 @12154 has 36 MA's), (32, 12220), (39, 12253),

Gene: Ares_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Ares_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: Argie_9 Start: 10545, Stop: 10733, Start Num: 23

Candidate Starts for Argie_9:

(Start: 23 @10545 has 28 MA's), (35, 10638), (38, 10656), (45, 10695), (48, 10725),

Gene: Axumite_10 Start: 9533, Stop: 9739, Start Num: 22

Candidate Starts for Axumite_10:

(1, 8870), (2, 8882), (8, 9125), (10, 9203), (Start: 22 @9533 has 7 MA's), (31, 9596),

Gene: Bananafish_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Bananafish_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: BiggityBass_9 Start: 9351, Stop: 9554, Start Num: 23

Candidate Starts for BiggityBass_9:

(12, 9090), (20, 9342), (Start: 23 @9351 has 28 MA's), (31, 9414), (40, 9465),

Gene: Blackpen_12 Start: 10522, Stop: 10725, Start Num: 23

Candidate Starts for Blackpen_12:

(19, 10501), (Start: 23 @10522 has 28 MA's), (27, 10552), (42, 10651),

Gene: Blocker23_14 Start: 12181, Stop: 12354, Start Num: 24

Candidate Starts for Blocker23_14:

(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: BobRoss2024_9 Start: 9382, Stop: 9585, Start Num: 23

Candidate Starts for BobRoss2024_9:

(16, 9268), (20, 9373), (Start: 23 @9382 has 28 MA's), (39, 9490), (41, 9499),

Gene: Boyle_14 Start: 12181, Stop: 12354, Start Num: 24

Candidate Starts for Boyle_14:

(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: Brownie5_14 Start: 12181, Stop: 12354, Start Num: 24

Candidate Starts for Brownie5_14:

(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: CaiB_12 Start: 11030, Stop: 11233, Start Num: 23

Candidate Starts for CaiB_12:

(Start: 23 @11030 has 28 MA's), (27, 11060), (42, 11159),

Gene: Calamitous_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Calamitous_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: Caterpie_8 Start: 8334, Stop: 8522, Start Num: 23

Candidate Starts for Caterpie_8:

(Start: 21 @8331 has 1 MA's), (Start: 23 @8334 has 28 MA's),

Gene: Causa_18 Start: 12947, Stop: 13141, Start Num: 23

Candidate Starts for Causa_18:

(13, 12701), (Start: 23 @12947 has 28 MA's), (28, 12998), (36, 13046),

Gene: Cepens_8 Start: 10284, Stop: 10472, Start Num: 23

Candidate Starts for Cepens_8:

(Start: 23 @10284 has 28 MA's), (35, 10377), (38, 10395), (45, 10434), (48, 10464),

Gene: CharlottesWeb_10 Start: 9585, Stop: 9791, Start Num: 22

Candidate Starts for CharlottesWeb_10:

(2, 8934), (3, 8958), (6, 9135), (9, 9201), (10, 9255), (Start: 22 @9585 has 7 MA's), (39, 9693), (40, 9699),

Gene: Clawz_43 Start: 22851, Stop: 23009, Start Num: 26

Candidate Starts for Clawz_43:

(11, 22557), (Start: 26 @22851 has 5 MA's), (30, 22890), (33, 22905), (34, 22908),

Gene: CloverMinnie_12 Start: 11030, Stop: 11233, Start Num: 23

Candidate Starts for CloverMinnie_12:
(Start: 23 @11030 has 28 MA's), (27, 11060), (42, 11159),

Gene: Coffee_14 Start: 12181, Stop: 12354, Start Num: 24
Candidate Starts for Coffee_14:
(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: ColdSoup_44 Start: 22933, Stop: 23091, Start Num: 26
Candidate Starts for ColdSoup_44:
(11, 22639), (Start: 26 @22933 has 5 MA's), (30, 22972), (34, 22990),

Gene: Coldpizza_12 Start: 11468, Stop: 11665, Start Num: 22
Candidate Starts for Coldpizza_12:
(Start: 22 @11468 has 7 MA's), (40, 11582),

Gene: D12_08 Start: 10239, Stop: 10427, Start Num: 23
Candidate Starts for D12_08:
(Start: 23 @10239 has 28 MA's), (35, 10332), (38, 10350), (45, 10389), (48, 10419),

Gene: DonTron_43 Start: 23003, Stop: 23161, Start Num: 26
Candidate Starts for DonTron_43:
(4, 22358), (5, 22382), (7, 22553), (11, 22709), (Start: 26 @23003 has 5 MA's), (30, 23042), (34, 23060),

Gene: Dori_9 Start: 8150, Stop: 8341, Start Num: 21
Candidate Starts for Dori_9:
(Start: 21 @8150 has 1 MA's), (Start: 23 @8153 has 28 MA's),

Gene: Eaglehorse_14 Start: 12082, Stop: 12255, Start Num: 24
Candidate Starts for Eaglehorse_14:
(Start: 24 @12082 has 36 MA's), (32, 12148), (39, 12181),

Gene: Evaa_11 Start: 10856, Stop: 11044, Start Num: 22
Candidate Starts for Evaa_11:
(1, 10193), (2, 10205), (3, 10229), (6, 10403), (8, 10445), (9, 10469), (Start: 22 @10856 has 7 MA's), (27, 10886), (40, 10970),

Gene: Faze9_14 Start: 12181, Stop: 12354, Start Num: 24
Candidate Starts for Faze9_14:
(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: FelixTres_12 Start: 11030, Stop: 11233, Start Num: 23
Candidate Starts for FelixTres_12:
(19, 11009), (Start: 23 @11030 has 28 MA's), (27, 11060), (42, 11159),

Gene: FrenchFry_14 Start: 12181, Stop: 12354, Start Num: 24
Candidate Starts for FrenchFry_14:
(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: Fresco_10 Start: 9533, Stop: 9739, Start Num: 22
Candidate Starts for Fresco_10:
(1, 8870), (2, 8882), (8, 9125), (10, 9203), (Start: 22 @9533 has 7 MA's), (31, 9596),

Gene: Glass_14 Start: 12181, Stop: 12354, Start Num: 24

Candidate Starts for Glass_14:

(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: GodPhather_9 Start: 10542, Stop: 10730, Start Num: 23

Candidate Starts for GodPhather_9:

(Start: 23 @10542 has 28 MA's), (35, 10635), (38, 10653), (45, 10692), (48, 10722),

Gene: Godines_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Godines_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: Hedgerow_14 Start: 12163, Stop: 12336, Start Num: 24

Candidate Starts for Hedgerow_14:

(Start: 24 @12163 has 36 MA's), (32, 12229), (39, 12262),

Gene: Holeinone_14 Start: 12063, Stop: 12236, Start Num: 24

Candidate Starts for Holeinone_14:

(Start: 24 @12063 has 36 MA's), (32, 12129), (39, 12162),

Gene: ItsyBitsy1_14 Start: 12055, Stop: 12228, Start Num: 24

Candidate Starts for ItsyBitsy1_14:

(Start: 24 @12055 has 36 MA's), (32, 12121), (39, 12154),

Gene: JellyBelly_10 Start: 9585, Stop: 9791, Start Num: 22

Candidate Starts for JellyBelly_10:

(2, 8934), (3, 8958), (6, 9135), (9, 9201), (Start: 22 @9585 has 7 MA's), (39, 9693), (40, 9699),

Gene: Jeon_8 Start: 10272, Stop: 10460, Start Num: 23

Candidate Starts for Jeon_8:

(Start: 23 @10272 has 28 MA's), (35, 10365), (38, 10383), (45, 10422), (48, 10452),

Gene: JohnLord_9 Start: 7856, Stop: 8044, Start Num: 23

Candidate Starts for JohnLord_9:

(Start: 21 @7853 has 1 MA's), (Start: 23 @7856 has 28 MA's),

Gene: Jollymon_43 Start: 22933, Stop: 23091, Start Num: 26

Candidate Starts for Jollymon_43:

(11, 22639), (Start: 26 @22933 has 5 MA's), (30, 22972), (34, 22990),

Gene: Kaleb_14 Start: 12181, Stop: 12354, Start Num: 24

Candidate Starts for Kaleb_14:

(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: Kheth_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Kheth_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: KingstonB_43 Start: 22441, Stop: 22599, Start Num: 26

Candidate Starts for KingstonB_43:

(11, 22147), (Start: 26 @22441 has 5 MA's), (30, 22480), (34, 22498),

Gene: Kolhan_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Kolhan_14:
(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: Lars_14 Start: 12181, Stop: 12354, Start Num: 24
Candidate Starts for Lars_14:
(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: Laurie_14 Start: 12065, Stop: 12238, Start Num: 24
Candidate Starts for Laurie_14:
(Start: 24 @12065 has 36 MA's), (32, 12131), (39, 12164),

Gene: Lephleur_14 Start: 12064, Stop: 12237, Start Num: 24
Candidate Starts for Lephleur_14:
(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: Ligma_10 Start: 9533, Stop: 9739, Start Num: 22
Candidate Starts for Ligma_10:
(1, 8870), (2, 8882), (8, 9125), (10, 9203), (Start: 22 @9533 has 7 MA's), (31, 9596),

Gene: LilSmirk_14 Start: 12064, Stop: 12237, Start Num: 24
Candidate Starts for LilSmirk_14:
(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: LittleMunchkin_11 Start: 10824, Stop: 11030, Start Num: 23
Candidate Starts for LittleMunchkin_11:
(15, 10707), (17, 10728), (18, 10767), (20, 10815), (Start: 23 @10824 has 28 MA's), (31, 10887),

Gene: LizLemon_14 Start: 12181, Stop: 12354, Start Num: 24
Candidate Starts for LizLemon_14:
(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: MakoManhole_12 Start: 11030, Stop: 11233, Start Num: 23
Candidate Starts for MakoManhole_12:
(Start: 23 @11030 has 28 MA's), (27, 11060), (42, 11159),

Gene: Mao1_8 Start: 8549, Stop: 8737, Start Num: 23
Candidate Starts for Mao1_8:
(Start: 21 @8546 has 1 MA's), (Start: 23 @8549 has 28 MA's),

Gene: Mariokart_10 Start: 9585, Stop: 9791, Start Num: 22
Candidate Starts for Mariokart_10:
(Start: 22 @9585 has 7 MA's), (39, 9693), (40, 9699),

Gene: Mask_9 Start: 8550, Stop: 8738, Start Num: 23
Candidate Starts for Mask_9:
(Start: 21 @8547 has 1 MA's), (Start: 23 @8550 has 28 MA's),

Gene: MasterPo_14 Start: 12064, Stop: 12237, Start Num: 24
Candidate Starts for MasterPo_14:
(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: Megabear_8 Start: 10239, Stop: 10427, Start Num: 23
Candidate Starts for Megabear_8:

(Start: 23 @10239 has 28 MA's), (35, 10332), (38, 10350), (45, 10389), (48, 10419),

Gene: MossRose_12 Start: 11030, Stop: 11233, Start Num: 23

Candidate Starts for MossRose_12:

(19, 11009), (Start: 23 @11030 has 28 MA's), (27, 11060), (42, 11159),

Gene: NHagos_10 Start: 9514, Stop: 9717, Start Num: 23

Candidate Starts for NHagos_10:

(Start: 23 @9514 has 28 MA's), (27, 9544), (48, 9685),

Gene: Opia_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Opia_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: PR_08 Start: 10239, Stop: 10427, Start Num: 23

Candidate Starts for PR_08:

(Start: 23 @10239 has 28 MA's), (35, 10332), (38, 10350), (45, 10389), (48, 10419),

Gene: Phantasmagoria_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Phantasmagoria_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: PrinceCharming_14 Start: 12181, Stop: 12354, Start Num: 24

Candidate Starts for PrinceCharming_14:

(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: Purplicious_41 Start: 22179, Stop: 22337, Start Num: 26

Candidate Starts for Purplicious_41:

(11, 21885), (Start: 26 @22179 has 5 MA's), (30, 22218), (34, 22236),

Gene: Rhinoforte_14 Start: 12181, Stop: 12354, Start Num: 24

Candidate Starts for Rhinoforte_14:

(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: Rosebush_14 Start: 12181, Stop: 12354, Start Num: 24

Candidate Starts for Rosebush_14:

(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: Sabella_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Sabella_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: Sejanus_9 Start: 9366, Stop: 9554, Start Num: 23

Candidate Starts for Sejanus_9:

(Start: 21 @9363 has 1 MA's), (Start: 23 @9366 has 28 MA's),

Gene: Shatter_10 Start: 9533, Stop: 9739, Start Num: 22

Candidate Starts for Shatter_10:

(1, 8870), (2, 8882), (8, 9125), (10, 9203), (Start: 22 @9533 has 7 MA's), (31, 9596),

Gene: Sisko_9 Start: 9345, Stop: 9548, Start Num: 23

Candidate Starts for Sisko_9:

(20, 9336), (Start: 23 @9345 has 28 MA's), (31, 9408), (44, 9480), (48, 9516),

Gene: Soos_39 Start: 22170, Stop: 22328, Start Num: 26

Candidate Starts for Soos_39:

(4, 21525), (5, 21549), (7, 21720), (11, 21876), (Start: 26 @22170 has 5 MA's), (30, 22209), (34, 22227),

Gene: Sour_13 Start: 11191, Stop: 11394, Start Num: 23

Candidate Starts for Sour_13:

(Start: 23 @11191 has 28 MA's), (39, 11299),

Gene: StAugustine_16 Start: 12941, Stop: 13135, Start Num: 23

Candidate Starts for StAugustine_16:

(Start: 23 @12941 has 28 MA's), (28, 12992), (36, 13040),

Gene: Sting_42 Start: 22609, Stop: 22767, Start Num: 26

Candidate Starts for Sting_42:

(11, 22315), (Start: 26 @22609 has 5 MA's), (30, 22648), (34, 22666),

Gene: TA17A_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for TA17A_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: TPA2_19 Start: 12170, Stop: 12361, Start Num: 23

Candidate Starts for TPA2_19:

(Start: 23 @12170 has 28 MA's), (31, 12233), (43, 12302), (47, 12338), (48, 12341),

Gene: Taptic_8 Start: 10239, Stop: 10427, Start Num: 23

Candidate Starts for Taptic_8:

(Start: 23 @10239 has 28 MA's), (35, 10332), (38, 10350), (45, 10389), (48, 10419),

Gene: Tinciduntolum_15 Start: 12180, Stop: 12353, Start Num: 24

Candidate Starts for Tinciduntolum_15:

(Start: 24 @12180 has 36 MA's), (32, 12246), (39, 12279),

Gene: Tonitrus_28 Start: 18735, Stop: 18884, Start Num: 25

Candidate Starts for Tonitrus_28:

(Start: 25 @18735 has 1 MA's), (33, 18783), (37, 18810), (46, 18870),

Gene: TraderJ_12 Start: 11027, Stop: 11230, Start Num: 23

Candidate Starts for TraderJ_12:

(19, 11006), (Start: 23 @11027 has 28 MA's), (27, 11057), (42, 11156),

Gene: Tres_14 Start: 12064, Stop: 12237, Start Num: 24

Candidate Starts for Tres_14:

(Start: 24 @12064 has 36 MA's), (32, 12130), (39, 12163),

Gene: Vic9_00014 Start: 12507, Stop: 12680, Start Num: 24

Candidate Starts for Vic9_00014:

(Start: 24 @12507 has 36 MA's), (32, 12573), (39, 12606),

Gene: West99_14 Start: 12181, Stop: 12354, Start Num: 24

Candidate Starts for West99_14:

(Start: 24 @12181 has 36 MA's), (32, 12247), (39, 12280),

Gene: Wooper_12 Start: 11030, Stop: 11233, Start Num: 23

Candidate Starts for Wooper_12:

(Start: 23 @11030 has 28 MA's), (27, 11060), (42, 11159),

Gene: Yago84_9 Start: 9354, Stop: 9557, Start Num: 23

Candidate Starts for Yago84_9:

(20, 9345), (Start: 23 @9354 has 28 MA's), (31, 9417), (44, 9489), (48, 9525),

Gene: Yeshua_12 Start: 11034, Stop: 11237, Start Num: 23

Candidate Starts for Yeshua_12:

(12, 10770), (14, 10863), (Start: 23 @11034 has 28 MA's), (27, 11064), (29, 11085), (42, 11163),