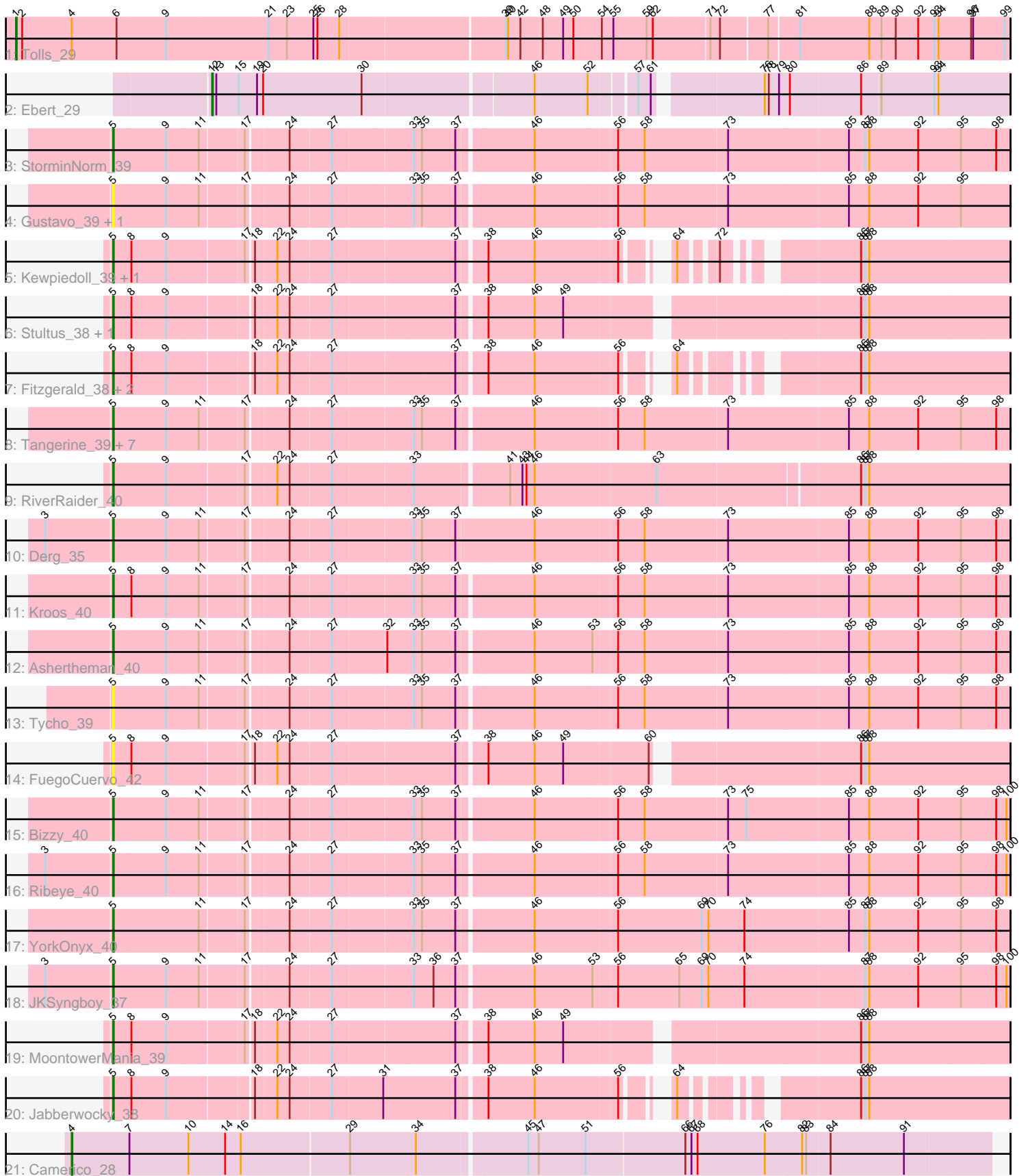


Pham 223311



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 223311 Report

This analysis was run 03/28/25 on database version 593.

Pham number 223311 has 33 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Tolls\_29
- Track 2 : Ebert\_29
- Track 3 : StorminNorm\_39
- Track 4 : Gustavo\_39, Saronaya\_39
- Track 5 : Kewpiedoll\_39, ChadMasterC\_40
- Track 6 : Stultus\_38, Geodirt\_38
- Track 7 : Fitzgerald\_38, Barsten\_40, Sanjuju\_38
- Track 8 : Tangerine\_39, LilHam\_37, Kwobi\_40, Baumdotcom\_38, Baddon\_39, Flatwoods\_40, Gaea\_39, SchottB\_38
- Track 9 : RiverRaider\_40
- Track 10 : Derg\_35
- Track 11 : Kroos\_40
- Track 12 : Ashertheman\_40
- Track 13 : Tycho\_39
- Track 14 : FuegoCuervo\_42
- Track 15 : Bizzy\_40
- Track 16 : Ribeye\_40
- Track 17 : YorkOnyx\_40
- Track 18 : JKSyngboy\_37
- Track 19 : MoontowerMania\_39
- Track 20 : Jabberwocky\_38
- Track 21 : Camerico\_28

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

The start number called the most often in the published annotations is 5, it was called in 23 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ashertheman\_40, Baddon\_39, Barsten\_40, Baumdotcom\_38, Bizzy\_40, ChadMasterC\_40, Derg\_35, Fitzgerald\_38, Flatwoods\_40, FuegoCuervo\_42, Gaea\_39, Geodirt\_38, Gustavo\_39, JKSyngboy\_37, Jabberwocky\_38, Kewpiedoll\_39, Kroos\_40, Kwobi\_40, LilHam\_37, MoontowerMania\_39, Ribeye\_40, RiverRaider\_40, Sanjuju\_38, Saronaya\_39, SchottB\_38, StorminNorm\_39,

Stultus\_38, Tangerine\_39, Tycho\_39, YorkOnyx\_40,

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

- 

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

- Camerico\_28, Ebert\_29, Tolls\_29,

### Summary by start number:

Start 1:

- Found in 1 of 33 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tolls\_29 (CT),

Start 4:

- Found in 2 of 33 ( 6.1% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Camerico\_28 (DF),

Start 5:

- Found in 30 of 33 ( 90.9% ) of genes in pham
- Manual Annotations of this start: 23 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ashertheman\_40 (DE1), Baddon\_39 (DE1), Barsten\_40 (DE1), Baumdotcom\_38 (DE1), Bizzy\_40 (DE1), ChadMasterC\_40 (DE1), Derg\_35 (DE1), Fitzgerald\_38 (DE1), Flatwoods\_40 (DE1), FuegoCuervo\_42 (DE1), Gaea\_39 (DE1), Geodirt\_38 (DE1), Gustavo\_39 (DE1), JKSyngboy\_37 (DE1), Jabberwocky\_38 (DE1), Kewpiedoll\_39 (DE1), Kroos\_40 (DE1), Kwobi\_40 (DE1), LilHam\_37 (DE1), MoontowerMania\_39 (DE1), Ribeye\_40 (DE1), RiverRaider\_40 (DE1), Sanjuju\_38 (DE1), Saronaya\_39 (DE1), SchottB\_38 (DE1), StorminNorm\_39 (DE1), Stultus\_38 (DE1), Tangerine\_39 (DE1), Tycho\_39 (DE1), YorkOnyx\_40 (DE1),

Start 12:

- Found in 1 of 33 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ebert\_29 (CZ2),

### Summary by clusters:

There are 4 clusters represented in this pham: CZ2, DE1, DF, CT,

Info for manual annotations of cluster CT:

- Start number 1 was manually annotated 1 time for cluster CT.

Info for manual annotations of cluster CZ2:

- Start number 12 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster DE1:

- Start number 5 was manually annotated 23 times for cluster DE1.

Info for manual annotations of cluster DF:

•Start number 4 was manually annotated 1 time for cluster DF.

**Gene Information:**

Gene: Ashertheman\_40 Start: 34502, Stop: 35743, Start Num: 5

Candidate Starts for Ashertheman\_40:

(Start: 5 @34502 has 23 MA's), (9, 34577), (11, 34622), (17, 34682), (24, 34736), (27, 34793), (32, 34868), (33, 34904), (35, 34916), (37, 34961), (46, 35063), (53, 35147), (56, 35177), (58, 35216), (73, 35336), (85, 35510), (88, 35540), (92, 35612), (95, 35672), (98, 35723),

Gene: Baddon\_39 Start: 35299, Stop: 36540, Start Num: 5

Candidate Starts for Baddon\_39:

(Start: 5 @35299 has 23 MA's), (9, 35374), (11, 35419), (17, 35479), (24, 35533), (27, 35590), (33, 35701), (35, 35713), (37, 35758), (46, 35860), (56, 35974), (58, 36013), (73, 36133), (85, 36307), (88, 36337), (92, 36409), (95, 36469), (98, 36520),

Gene: Barsten\_40 Start: 34796, Stop: 35917, Start Num: 5

Candidate Starts for Barsten\_40:

(Start: 5 @34796 has 23 MA's), (8, 34820), (9, 34871), (18, 34985), (22, 35012), (24, 35030), (27, 35087), (37, 35255), (38, 35291), (46, 35357), (56, 35471), (64, 35510), (86, 35702), (87, 35708), (88, 35714),

Gene: Baumdotcom\_38 Start: 34155, Stop: 35396, Start Num: 5

Candidate Starts for Baumdotcom\_38:

(Start: 5 @34155 has 23 MA's), (9, 34230), (11, 34275), (17, 34335), (24, 34389), (27, 34446), (33, 34557), (35, 34569), (37, 34614), (46, 34716), (56, 34830), (58, 34869), (73, 34989), (85, 35163), (88, 35193), (92, 35265), (95, 35325), (98, 35376),

Gene: Bizzy\_40 Start: 34446, Stop: 35687, Start Num: 5

Candidate Starts for Bizzy\_40:

(Start: 5 @34446 has 23 MA's), (9, 34521), (11, 34566), (17, 34626), (24, 34680), (27, 34737), (33, 34848), (35, 34860), (37, 34905), (46, 35007), (56, 35121), (58, 35160), (73, 35280), (75, 35307), (85, 35454), (88, 35484), (92, 35556), (95, 35616), (98, 35667), (100, 35682),

Gene: Camerico\_28 Start: 33627, Stop: 34943, Start Num: 4

Candidate Starts for Camerico\_28:

(Start: 4 @33627 has 1 MA's), (7, 33711), (10, 33798), (14, 33852), (16, 33873), (29, 34029), (34, 34125), (45, 34278), (47, 34293), (51, 34362), (66, 34503), (67, 34512), (68, 34521), (76, 34620), (82, 34674), (83, 34680), (84, 34713), (91, 34821),

Gene: ChadMasterC\_40 Start: 36195, Stop: 37316, Start Num: 5

Candidate Starts for ChadMasterC\_40:

(Start: 5 @36195 has 23 MA's), (8, 36219), (9, 36270), (17, 36375), (18, 36384), (22, 36411), (24, 36429), (27, 36486), (37, 36654), (38, 36690), (46, 36756), (56, 36870), (64, 36909), (72, 36948), (86, 37101), (87, 37107), (88, 37113),

Gene: Derg\_35 Start: 34042, Stop: 35292, Start Num: 5

Candidate Starts for Derg\_35:

(3, 33946), (Start: 5 @34042 has 23 MA's), (9, 34117), (11, 34162), (17, 34222), (24, 34276), (27, 34333), (33, 34444), (35, 34456), (37, 34501), (46, 34612), (56, 34726), (58, 34765), (73, 34885), (85, 35059), (88, 35089), (92, 35161), (95, 35221), (98, 35272),

Gene: Ebert\_29 Start: 23678, Stop: 24772, Start Num: 12

Candidate Starts for Ebert\_29:

(Start: 12 @23678 has 1 MA's), (13, 23684), (15, 23717), (19, 23744), (20, 23753), (30, 23894), (46, 24128), (52, 24200), (57, 24260), (61, 24278), (76, 24419), (78, 24425), (79, 24440), (80, 24455), (86, 24557), (89, 24584), (93, 24662), (94, 24668),

Gene: Fitzgerald\_38 Start: 35470, Stop: 36591, Start Num: 5

Candidate Starts for Fitzgerald\_38:

(Start: 5 @35470 has 23 MA's), (8, 35494), (9, 35545), (18, 35659), (22, 35686), (24, 35704), (27, 35761), (37, 35929), (38, 35965), (46, 36031), (56, 36145), (64, 36184), (86, 36376), (87, 36382), (88, 36388),

Gene: Flatwoods\_40 Start: 34403, Stop: 35644, Start Num: 5

Candidate Starts for Flatwoods\_40:

(Start: 5 @34403 has 23 MA's), (9, 34478), (11, 34523), (17, 34583), (24, 34637), (27, 34694), (33, 34805), (35, 34817), (37, 34862), (46, 34964), (56, 35078), (58, 35117), (73, 35237), (85, 35411), (88, 35441), (92, 35513), (95, 35573), (98, 35624),

Gene: FuegoCuervo\_42 Start: 33799, Stop: 35013, Start Num: 5

Candidate Starts for FuegoCuervo\_42:

(Start: 5 @33799 has 23 MA's), (8, 33823), (9, 33874), (17, 33979), (18, 33988), (22, 34015), (24, 34033), (27, 34090), (37, 34258), (38, 34294), (46, 34360), (49, 34402), (60, 34522), (86, 34798), (87, 34804), (88, 34810),

Gene: Gaea\_39 Start: 34051, Stop: 35292, Start Num: 5

Candidate Starts for Gaea\_39:

(Start: 5 @34051 has 23 MA's), (9, 34126), (11, 34171), (17, 34231), (24, 34285), (27, 34342), (33, 34453), (35, 34465), (37, 34510), (46, 34612), (56, 34726), (58, 34765), (73, 34885), (85, 35059), (88, 35089), (92, 35161), (95, 35221), (98, 35272),

Gene: Geodirt\_38 Start: 35338, Stop: 36552, Start Num: 5

Candidate Starts for Geodirt\_38:

(Start: 5 @35338 has 23 MA's), (8, 35362), (9, 35413), (18, 35527), (22, 35554), (24, 35572), (27, 35629), (37, 35797), (38, 35833), (46, 35899), (49, 35941), (86, 36337), (87, 36343), (88, 36349),

Gene: Gustavo\_39 Start: 34206, Stop: 35447, Start Num: 5

Candidate Starts for Gustavo\_39:

(Start: 5 @34206 has 23 MA's), (9, 34281), (11, 34326), (17, 34386), (24, 34440), (27, 34497), (33, 34608), (35, 34620), (37, 34665), (46, 34767), (56, 34881), (58, 34920), (73, 35040), (85, 35214), (88, 35244), (92, 35316), (95, 35376),

Gene: JKSyngboy\_37 Start: 34781, Stop: 36022, Start Num: 5

Candidate Starts for JKSyngboy\_37:

(3, 34685), (Start: 5 @34781 has 23 MA's), (9, 34856), (11, 34901), (17, 34961), (24, 35015), (27, 35072), (33, 35183), (36, 35210), (37, 35240), (46, 35342), (53, 35426), (56, 35456), (65, 35546), (69, 35579), (70, 35588), (74, 35639), (87, 35813), (88, 35819), (92, 35891), (95, 35951), (98, 36002), (100, 36017),

Gene: Jabberwocky\_38 Start: 35874, Stop: 36995, Start Num: 5

Candidate Starts for Jabberwocky\_38:

(Start: 5 @35874 has 23 MA's), (8, 35898), (9, 35949), (18, 36063), (22, 36090), (24, 36108), (27, 36165), (31, 36237), (37, 36333), (38, 36369), (46, 36435), (56, 36549), (64, 36588), (86, 36780), (87, 36786), (88, 36792),

Gene: Kewpiedoll\_39 Start: 34733, Stop: 35854, Start Num: 5

Candidate Starts for Kewpiedoll\_39:

(Start: 5 @34733 has 23 MA's), (8, 34757), (9, 34808), (17, 34913), (18, 34922), (22, 34949), (24, 34967), (27, 35024), (37, 35192), (38, 35228), (46, 35294), (56, 35408), (64, 35447), (72, 35486), (86, 35639), (87, 35645), (88, 35651),

Gene: Kroos\_40 Start: 34959, Stop: 36200, Start Num: 5

Candidate Starts for Kroos\_40:

(Start: 5 @34959 has 23 MA's), (8, 34983), (9, 35034), (11, 35079), (17, 35139), (24, 35193), (27, 35250), (33, 35361), (35, 35373), (37, 35418), (46, 35520), (56, 35634), (58, 35673), (73, 35793), (85, 35967), (88, 35997), (92, 36069), (95, 36129), (98, 36180),

Gene: Kwobi\_40 Start: 34945, Stop: 36186, Start Num: 5

Candidate Starts for Kwobi\_40:

(Start: 5 @34945 has 23 MA's), (9, 35020), (11, 35065), (17, 35125), (24, 35179), (27, 35236), (33, 35347), (35, 35359), (37, 35404), (46, 35506), (56, 35620), (58, 35659), (73, 35779), (85, 35953), (88, 35983), (92, 36055), (95, 36115), (98, 36166),

Gene: LilHam\_37 Start: 33548, Stop: 34789, Start Num: 5

Candidate Starts for LilHam\_37:

(Start: 5 @33548 has 23 MA's), (9, 33623), (11, 33668), (17, 33728), (24, 33782), (27, 33839), (33, 33950), (35, 33962), (37, 34007), (46, 34109), (56, 34223), (58, 34262), (73, 34382), (85, 34556), (88, 34586), (92, 34658), (95, 34718), (98, 34769),

Gene: MoontowerMania\_39 Start: 35099, Stop: 36313, Start Num: 5

Candidate Starts for MoontowerMania\_39:

(Start: 5 @35099 has 23 MA's), (8, 35123), (9, 35174), (17, 35279), (18, 35288), (22, 35315), (24, 35333), (27, 35390), (37, 35558), (38, 35594), (46, 35660), (49, 35702), (86, 36098), (87, 36104), (88, 36110),

Gene: Ribeye\_40 Start: 35363, Stop: 36604, Start Num: 5

Candidate Starts for Ribeye\_40:

(3, 35267), (Start: 5 @35363 has 23 MA's), (9, 35438), (11, 35483), (17, 35543), (24, 35597), (27, 35654), (33, 35765), (35, 35777), (37, 35822), (46, 35924), (56, 36038), (58, 36077), (73, 36197), (85, 36371), (88, 36401), (92, 36473), (95, 36533), (98, 36584), (100, 36599),

Gene: RiverRaider\_40 Start: 33592, Stop: 34821, Start Num: 5

Candidate Starts for RiverRaider\_40:

(Start: 5 @33592 has 23 MA's), (9, 33667), (17, 33772), (22, 33808), (24, 33826), (27, 33883), (33, 33994), (41, 34117), (43, 34135), (44, 34141), (46, 34153), (63, 34324), (86, 34606), (87, 34612), (88, 34618),

Gene: Sanjuju\_38 Start: 35603, Stop: 36724, Start Num: 5

Candidate Starts for Sanjuju\_38:

(Start: 5 @35603 has 23 MA's), (8, 35627), (9, 35678), (18, 35792), (22, 35819), (24, 35837), (27, 35894), (37, 36062), (38, 36098), (46, 36164), (56, 36278), (64, 36317), (86, 36509), (87, 36515), (88, 36521),

Gene: Saronaya\_39 Start: 34206, Stop: 35447, Start Num: 5

Candidate Starts for Saronaya\_39:

(Start: 5 @34206 has 23 MA's), (9, 34281), (11, 34326), (17, 34386), (24, 34440), (27, 34497), (33, 34608), (35, 34620), (37, 34665), (46, 34767), (56, 34881), (58, 34920), (73, 35040), (85, 35214), (88, 35244), (92, 35316), (95, 35376),

Gene: SchottB\_38 Start: 35221, Stop: 36462, Start Num: 5

Candidate Starts for SchottB\_38:

(Start: 5 @35221 has 23 MA's), (9, 35296), (11, 35341), (17, 35401), (24, 35455), (27, 35512), (33, 35623), (35, 35635), (37, 35680), (46, 35782), (56, 35896), (58, 35935), (73, 36055), (85, 36229), (88, 36259), (92, 36331), (95, 36391), (98, 36442),

Gene: StorminNorm\_39 Start: 34088, Stop: 35329, Start Num: 5

Candidate Starts for StorminNorm\_39:

(Start: 5 @34088 has 23 MA's), (9, 34163), (11, 34208), (17, 34268), (24, 34322), (27, 34379), (33, 34490), (35, 34502), (37, 34547), (46, 34649), (56, 34763), (58, 34802), (73, 34922), (85, 35096), (87, 35120), (88, 35126), (92, 35198), (95, 35258), (98, 35309),

Gene: Stultus\_38 Start: 34405, Stop: 35619, Start Num: 5

Candidate Starts for Stultus\_38:

(Start: 5 @34405 has 23 MA's), (8, 34429), (9, 34480), (18, 34594), (22, 34621), (24, 34639), (27, 34696), (37, 34864), (38, 34900), (46, 34966), (49, 35008), (86, 35404), (87, 35410), (88, 35416),

Gene: Tangerine\_39 Start: 34091, Stop: 35332, Start Num: 5

Candidate Starts for Tangerine\_39:

(Start: 5 @34091 has 23 MA's), (9, 34166), (11, 34211), (17, 34271), (24, 34325), (27, 34382), (33, 34493), (35, 34505), (37, 34550), (46, 34652), (56, 34766), (58, 34805), (73, 34925), (85, 35099), (88, 35129), (92, 35201), (95, 35261), (98, 35312),

Gene: Tolls\_29 Start: 21618, Stop: 23021, Start Num: 1

Candidate Starts for Tolls\_29:

(Start: 1 @21618 has 1 MA's), (2, 21627), (Start: 4 @21699 has 1 MA's), (6, 21765), (9, 21837), (21, 21984), (23, 22011), (25, 22050), (26, 22056), (28, 22086), (39, 22311), (40, 22314), (42, 22329), (48, 22359), (49, 22389), (50, 22404), (54, 22446), (55, 22461), (59, 22509), (62, 22518), (71, 22596), (72, 22608), (77, 22674), (81, 22716), (88, 22818), (89, 22836), (90, 22857), (92, 22890), (93, 22914), (94, 22920), (96, 22968), (97, 22971), (99, 23016),

Gene: Tycho\_39 Start: 34180, Stop: 35421, Start Num: 5

Candidate Starts for Tycho\_39:

(Start: 5 @34180 has 23 MA's), (9, 34255), (11, 34300), (17, 34360), (24, 34414), (27, 34471), (33, 34582), (35, 34594), (37, 34639), (46, 34741), (56, 34855), (58, 34894), (73, 35014), (85, 35188), (88, 35218), (92, 35290), (95, 35350), (98, 35401),

Gene: YorkOnyx\_40 Start: 34439, Stop: 35680, Start Num: 5

Candidate Starts for YorkOnyx\_40:

(Start: 5 @34439 has 23 MA's), (11, 34559), (17, 34619), (24, 34673), (27, 34730), (33, 34841), (35, 34853), (37, 34898), (46, 35000), (56, 35114), (69, 35237), (70, 35246), (74, 35297), (85, 35447), (87, 35471), (88, 35477), (92, 35549), (95, 35609), (98, 35660),