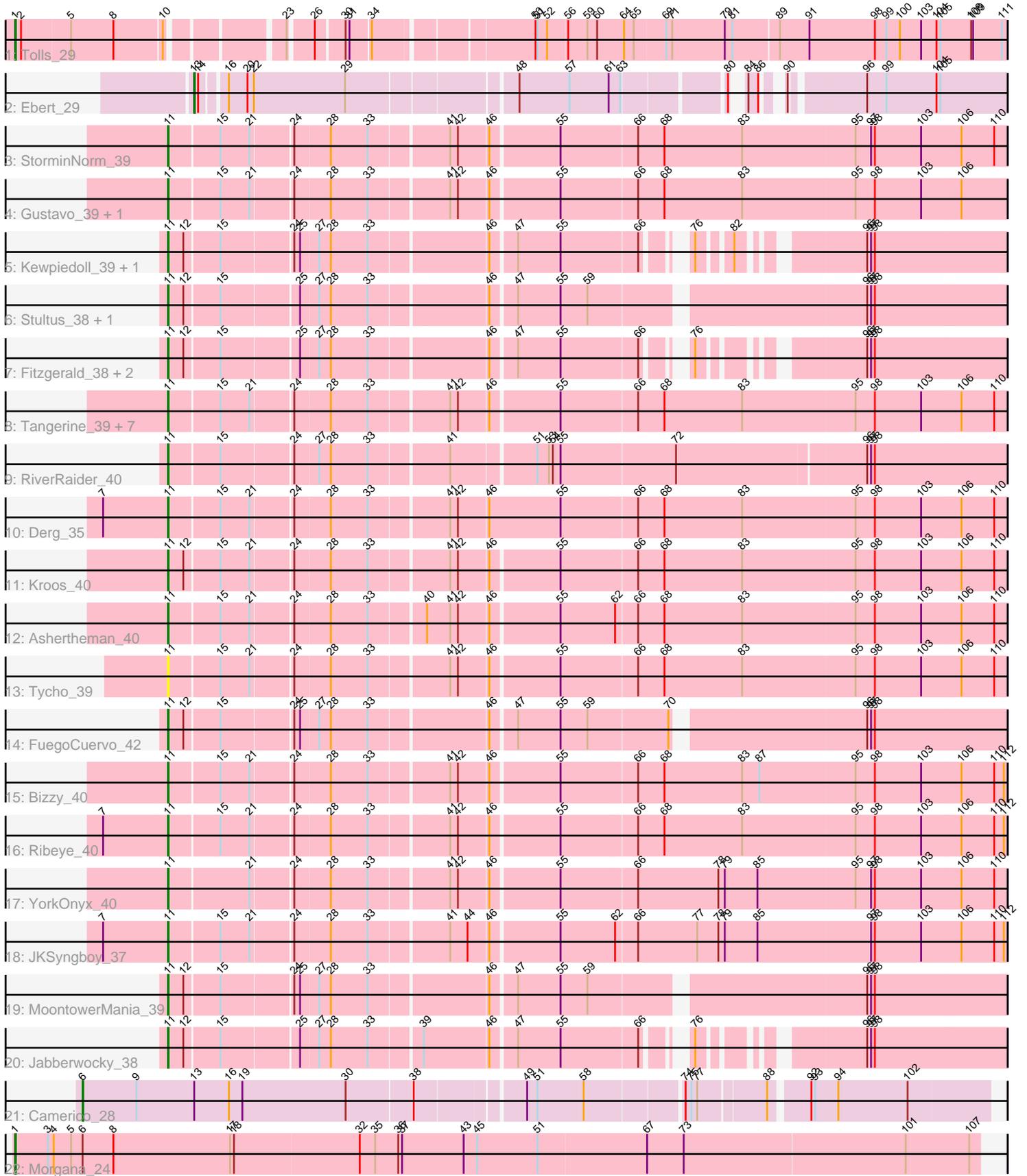# Pham 284020

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 284020 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284020 has 34 members, 1 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_41, 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
• Track 22 : Morgana_24

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

The start number called the most often in the published annotations is 11, it was called in 29 of the 33 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_41, 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, Morgana_24, Tolls_29,

Summary by start number:

Start 1:
• Found in 2 of 34 (5.9%) of genes in pham
• Manual Annotations of this start: 2 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Morgana_24 (DZ), Tolls_29 (CT),

Start 6:
• Found in 2 of 34 (5.9%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Camerico_28 (DF4),

Start 11:
• Found in 30 of 34 (88.2%) of genes in pham
• Manual Annotations of this start: 29 of 33
• 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_41 (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 13:
• Found in 2 of 34 (5.9%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Ebert_29 (CZ2),

Summary by clusters:

There are 5 clusters represented in this pham: CZ2, DE1, DZ, DF4, 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 13 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster DE1:

•Start number 11 was manually annotated 29 times for cluster DE1.

Info for manual annotations of cluster DF4:
•Start number 6 was manually annotated 1 time for cluster DF4.

Info for manual annotations of cluster DZ:
•Start number 1 was manually annotated 1 time for cluster DZ.

Gene Information:

Gene: Ashertheman_40 Start: 34502, Stop: 35743, Start Num: 11
Candidate Starts for Ashertheman_40:
(Start: 11 @34502 has 29 MA's), (15, 34577), (21, 34622), (24, 34682), (28, 34736), (33, 34793), (40, 34868), (41, 34904), (42, 34916), (46, 34961), (55, 35063), (62, 35147), (66, 35177), (68, 35216), (83, 35336), (95, 35510), (98, 35540), (103, 35612), (106, 35672), (110, 35723),

Gene: Baddon_39 Start: 35299, Stop: 36540, Start Num: 11
Candidate Starts for Baddon_39:
(Start: 11 @35299 has 29 MA's), (15, 35374), (21, 35419), (24, 35479), (28, 35533), (33, 35590), (41, 35701), (42, 35713), (46, 35758), (55, 35860), (66, 35974), (68, 36013), (83, 36133), (95, 36307), (98, 36337), (103, 36409), (106, 36469), (110, 36520),

Gene: Barsten_40 Start: 34796, Stop: 35917, Start Num: 11
Candidate Starts for Barsten_40:
(Start: 11 @34796 has 29 MA's), (12, 34820), (15, 34871), (25, 34985), (27, 35012), (28, 35030), (33, 35087), (46, 35255), (47, 35291), (55, 35357), (66, 35471), (76, 35510), (96, 35702), (97, 35708), (98, 35714),

Gene: Baumdotcom_38 Start: 34155, Stop: 35396, Start Num: 11
Candidate Starts for Baumdotcom_38:
(Start: 11 @34155 has 29 MA's), (15, 34230), (21, 34275), (24, 34335), (28, 34389), (33, 34446), (41, 34557), (42, 34569), (46, 34614), (55, 34716), (66, 34830), (68, 34869), (83, 34989), (95, 35163), (98, 35193), (103, 35265), (106, 35325), (110, 35376),

Gene: Bizzy_40 Start: 34446, Stop: 35687, Start Num: 11
Candidate Starts for Bizzy_40:
(Start: 11 @34446 has 29 MA's), (15, 34521), (21, 34566), (24, 34626), (28, 34680), (33, 34737), (41, 34848), (42, 34860), (46, 34905), (55, 35007), (66, 35121), (68, 35160), (83, 35280), (87, 35307), (95, 35454), (98, 35484), (103, 35556), (106, 35616), (110, 35667), (112, 35682),

Gene: Camerico_28 Start: 33627, Stop: 34943, Start Num: 6
Candidate Starts for Camerico_28:
(Start: 6 @33627 has 1 MA's), (9, 33711), (Start: 13 @33798 has 1 MA's), (16, 33852), (19, 33873), (30, 34029), (38, 34125), (49, 34278), (51, 34293), (58, 34362), (74, 34503), (75, 34512), (77, 34521), (88, 34620), (92, 34674), (93, 34680), (94, 34713), (102, 34821),

Gene: ChadMasterC_40 Start: 36195, Stop: 37316, Start Num: 11
Candidate Starts for ChadMasterC_40:
(Start: 11 @36195 has 29 MA's), (12, 36219), (15, 36270), (24, 36375), (25, 36384), (27, 36411), (28, 36429), (33, 36486), (46, 36654), (47, 36690), (55, 36756), (66, 36870), (76, 36909), (82, 36948), (96, 37101), (97, 37107), (98, 37113),

Gene: Derg_35 Start: 34042, Stop: 35292, Start Num: 11
Candidate Starts for Derg_35:
(7, 33946), (Start: 11 @34042 has 29 MA's), (15, 34117), (21, 34162), (24, 34222), (28, 34276), (33, 34333), (41, 34444), (42, 34456), (46, 34501), (55, 34612), (66, 34726), (68, 34765), (83, 34885), (95, 35059), (98, 35089), (103, 35161), (106, 35221), (110, 35272),

Gene: Ebert_29 Start: 23678, Stop: 24772, Start Num: 13
Candidate Starts for Ebert_29:
(Start: 13 @23678 has 1 MA's), (14, 23684), (16, 23717), (20, 23744), (22, 23753), (29, 23894), (48, 24128), (57, 24200), (61, 24260), (63, 24278), (80, 24419), (84, 24425), (86, 24440), (90, 24455), (96, 24557), (99, 24584), (104, 24662), (105, 24668),

Gene: Fitzgerald_38 Start: 35470, Stop: 36591, Start Num: 11
Candidate Starts for Fitzgerald_38:
(Start: 11 @35470 has 29 MA's), (12, 35494), (15, 35545), (25, 35659), (27, 35686), (28, 35704), (33, 35761), (46, 35929), (47, 35965), (55, 36031), (66, 36145), (76, 36184), (96, 36376), (97, 36382), (98, 36388),

Gene: Flatwoods_40 Start: 34403, Stop: 35644, Start Num: 11
Candidate Starts for Flatwoods_40:
(Start: 11 @34403 has 29 MA's), (15, 34478), (21, 34523), (24, 34583), (28, 34637), (33, 34694), (41, 34805), (42, 34817), (46, 34862), (55, 34964), (66, 35078), (68, 35117), (83, 35237), (95, 35411), (98, 35441), (103, 35513), (106, 35573), (110, 35624),

Gene: FuegoCuervo_42 Start: 33799, Stop: 35013, Start Num: 11
Candidate Starts for FuegoCuervo_42:
(Start: 11 @33799 has 29 MA's), (12, 33823), (15, 33874), (24, 33979), (25, 33988), (27, 34015), (28, 34033), (33, 34090), (46, 34258), (47, 34294), (55, 34360), (59, 34402), (70, 34522), (96, 34798), (97, 34804), (98, 34810),

Gene: Gaea_39 Start: 34051, Stop: 35292, Start Num: 11
Candidate Starts for Gaea_39:
(Start: 11 @34051 has 29 MA's), (15, 34126), (21, 34171), (24, 34231), (28, 34285), (33, 34342), (41, 34453), (42, 34465), (46, 34510), (55, 34612), (66, 34726), (68, 34765), (83, 34885), (95, 35059), (98, 35089), (103, 35161), (106, 35221), (110, 35272),

Gene: Geodirt_38 Start: 35338, Stop: 36552, Start Num: 11
Candidate Starts for Geodirt_38:
(Start: 11 @35338 has 29 MA's), (12, 35362), (15, 35413), (25, 35527), (27, 35554), (28, 35572), (33, 35629), (46, 35797), (47, 35833), (55, 35899), (59, 35941), (96, 36337), (97, 36343), (98, 36349),

Gene: Gustavo_39 Start: 34206, Stop: 35447, Start Num: 11
Candidate Starts for Gustavo_39:
(Start: 11 @34206 has 29 MA's), (15, 34281), (21, 34326), (24, 34386), (28, 34440), (33, 34497), (41, 34608), (42, 34620), (46, 34665), (55, 34767), (66, 34881), (68, 34920), (83, 35040), (95, 35214), (98, 35244), (103, 35316), (106, 35376),

Gene: JKSyngboy_37 Start: 34781, Stop: 36022, Start Num: 11
Candidate Starts for JKSyngboy_37:
(7, 34685), (Start: 11 @34781 has 29 MA's), (15, 34856), (21, 34901), (24, 34961), (28, 35015), (33, 35072), (41, 35183), (44, 35210), (46, 35240), (55, 35342), (62, 35426), (66, 35456), (77, 35546), (78, 35579), (79, 35588), (85, 35639), (97, 35813), (98, 35819), (103, 35891), (106, 35951), (110, 36002),

(112, 36017),

Gene: Jabberwocky_38 Start: 35874, Stop: 36995, Start Num: 11
Candidate Starts for Jabberwocky_38:
(Start: 11 @35874 has 29 MA's), (12, 35898), (15, 35949), (25, 36063), (27, 36090), (28, 36108), (33, 36165), (39, 36237), (46, 36333), (47, 36369), (55, 36435), (66, 36549), (76, 36588), (96, 36780), (97, 36786), (98, 36792),

Gene: Kewpiedoll_39 Start: 34733, Stop: 35854, Start Num: 11
Candidate Starts for Kewpiedoll_39:
(Start: 11 @34733 has 29 MA's), (12, 34757), (15, 34808), (24, 34913), (25, 34922), (27, 34949), (28, 34967), (33, 35024), (46, 35192), (47, 35228), (55, 35294), (66, 35408), (76, 35447), (82, 35486), (96, 35639), (97, 35645), (98, 35651),

Gene: Kroos_40 Start: 34959, Stop: 36200, Start Num: 11
Candidate Starts for Kroos_40:
(Start: 11 @34959 has 29 MA's), (12, 34983), (15, 35034), (21, 35079), (24, 35139), (28, 35193), (33, 35250), (41, 35361), (42, 35373), (46, 35418), (55, 35520), (66, 35634), (68, 35673), (83, 35793), (95, 35967), (98, 35997), (103, 36069), (106, 36129), (110, 36180),

Gene: Kwobi_41 Start: 34945, Stop: 36186, Start Num: 11
Candidate Starts for Kwobi_41:
(Start: 11 @34945 has 29 MA's), (15, 35020), (21, 35065), (24, 35125), (28, 35179), (33, 35236), (41, 35347), (42, 35359), (46, 35404), (55, 35506), (66, 35620), (68, 35659), (83, 35779), (95, 35953), (98, 35983), (103, 36055), (106, 36115), (110, 36166),

Gene: LilHam_37 Start: 33548, Stop: 34789, Start Num: 11
Candidate Starts for LilHam_37:
(Start: 11 @33548 has 29 MA's), (15, 33623), (21, 33668), (24, 33728), (28, 33782), (33, 33839), (41, 33950), (42, 33962), (46, 34007), (55, 34109), (66, 34223), (68, 34262), (83, 34382), (95, 34556), (98, 34586), (103, 34658), (106, 34718), (110, 34769),

Gene: MoontowerMania_39 Start: 35099, Stop: 36313, Start Num: 11
Candidate Starts for MoontowerMania_39:
(Start: 11 @35099 has 29 MA's), (12, 35123), (15, 35174), (24, 35279), (25, 35288), (27, 35315), (28, 35333), (33, 35390), (46, 35558), (47, 35594), (55, 35660), (59, 35702), (96, 36098), (97, 36104), (98, 36110),

Gene: Morgana_24 Start: 21426, Stop: 22886, Start Num: 1
Candidate Starts for Morgana_24:
(Start: 1 @21426 has 2 MA's), (3, 21477), (4, 21486), (5, 21513), (Start: 6 @21531 has 1 MA's), (8, 21579), (17, 21759), (18, 21765), (32, 21954), (35, 21978), (36, 22014), (37, 22020), (43, 22116), (45, 22137), (51, 22230), (67, 22398), (73, 22455), (101, 22779), (107, 22872),

Gene: Ribeye_40 Start: 35363, Stop: 36604, Start Num: 11
Candidate Starts for Ribeye_40:
(7, 35267), (Start: 11 @35363 has 29 MA's), (15, 35438), (21, 35483), (24, 35543), (28, 35597), (33, 35654), (41, 35765), (42, 35777), (46, 35822), (55, 35924), (66, 36038), (68, 36077), (83, 36197), (95, 36371), (98, 36401), (103, 36473), (106, 36533), (110, 36584), (112, 36599),

Gene: RiverRaider_40 Start: 33592, Stop: 34821, Start Num: 11
Candidate Starts for RiverRaider_40:

(Start: 11 @33592 has 29 MA's), (15, 33667), (24, 33772), (27, 33808), (28, 33826), (33, 33883), (41, 33994), (51, 34117), (53, 34135), (54, 34141), (55, 34153), (72, 34324), (96, 34606), (97, 34612), (98, 34618),

Gene: Sanjuju_38 Start: 35603, Stop: 36724, Start Num: 11
Candidate Starts for Sanjuju_38:
(Start: 11 @35603 has 29 MA's), (12, 35627), (15, 35678), (25, 35792), (27, 35819), (28, 35837), (33, 35894), (46, 36062), (47, 36098), (55, 36164), (66, 36278), (76, 36317), (96, 36509), (97, 36515), (98, 36521),

Gene: Saronaya_39 Start: 34206, Stop: 35447, Start Num: 11
Candidate Starts for Saronaya_39:
(Start: 11 @34206 has 29 MA's), (15, 34281), (21, 34326), (24, 34386), (28, 34440), (33, 34497), (41, 34608), (42, 34620), (46, 34665), (55, 34767), (66, 34881), (68, 34920), (83, 35040), (95, 35214), (98, 35244), (103, 35316), (106, 35376),

Gene: SchottB_38 Start: 35221, Stop: 36462, Start Num: 11
Candidate Starts for SchottB_38:
(Start: 11 @35221 has 29 MA's), (15, 35296), (21, 35341), (24, 35401), (28, 35455), (33, 35512), (41, 35623), (42, 35635), (46, 35680), (55, 35782), (66, 35896), (68, 35935), (83, 36055), (95, 36229), (98, 36259), (103, 36331), (106, 36391), (110, 36442),

Gene: StorminNorm_39 Start: 34088, Stop: 35329, Start Num: 11
Candidate Starts for StorminNorm_39:
(Start: 11 @34088 has 29 MA's), (15, 34163), (21, 34208), (24, 34268), (28, 34322), (33, 34379), (41, 34490), (42, 34502), (46, 34547), (55, 34649), (66, 34763), (68, 34802), (83, 34922), (95, 35096), (97, 35120), (98, 35126), (103, 35198), (106, 35258), (110, 35309),

Gene: Stultus_38 Start: 34405, Stop: 35619, Start Num: 11
Candidate Starts for Stultus_38:
(Start: 11 @34405 has 29 MA's), (12, 34429), (15, 34480), (25, 34594), (27, 34621), (28, 34639), (33, 34696), (46, 34864), (47, 34900), (55, 34966), (59, 35008), (96, 35404), (97, 35410), (98, 35416),

Gene: Tangerine_39 Start: 34091, Stop: 35332, Start Num: 11
Candidate Starts for Tangerine_39:
(Start: 11 @34091 has 29 MA's), (15, 34166), (21, 34211), (24, 34271), (28, 34325), (33, 34382), (41, 34493), (42, 34505), (46, 34550), (55, 34652), (66, 34766), (68, 34805), (83, 34925), (95, 35099), (98, 35129), (103, 35201), (106, 35261), (110, 35312),

Gene: Tolls_29 Start: 21618, Stop: 23021, Start Num: 1
Candidate Starts for Tolls_29:
(Start: 1 @21618 has 2 MA's), (2, 21627), (5, 21699), (8, 21765), (10, 21837), (23, 21984), (26, 22011), (30, 22050), (31, 22056), (34, 22086), (50, 22311), (51, 22314), (52, 22329), (56, 22359), (59, 22389), (60, 22404), (64, 22446), (65, 22461), (69, 22509), (71, 22518), (79, 22596), (81, 22608), (89, 22674), (91, 22716), (98, 22818), (99, 22836), (100, 22857), (103, 22890), (104, 22914), (105, 22920), (108, 22968), (109, 22971), (111, 23016),

Gene: Tycho_39 Start: 34180, Stop: 35421, Start Num: 11
Candidate Starts for Tycho_39:
(Start: 11 @34180 has 29 MA's), (15, 34255), (21, 34300), (24, 34360), (28, 34414), (33, 34471), (41, 34582), (42, 34594), (46, 34639), (55, 34741), (66, 34855), (68, 34894), (83, 35014), (95, 35188), (98, 35218), (103, 35290), (106, 35350), (110, 35401),

Gene: YorkOnyx_40 Start: 34439, Stop: 35680, Start Num: 11
Candidate Starts for YorkOnyx_40:
(Start: 11 @34439 has 29 MA's), (21, 34559), (24, 34619), (28, 34673), (33, 34730), (41, 34841), (42, 34853), (46, 34898), (55, 35000), (66, 35114), (78, 35237), (79, 35246), (85, 35297), (95, 35447), (97, 35471), (98, 35477), (103, 35549), (106, 35609), (110, 35660),