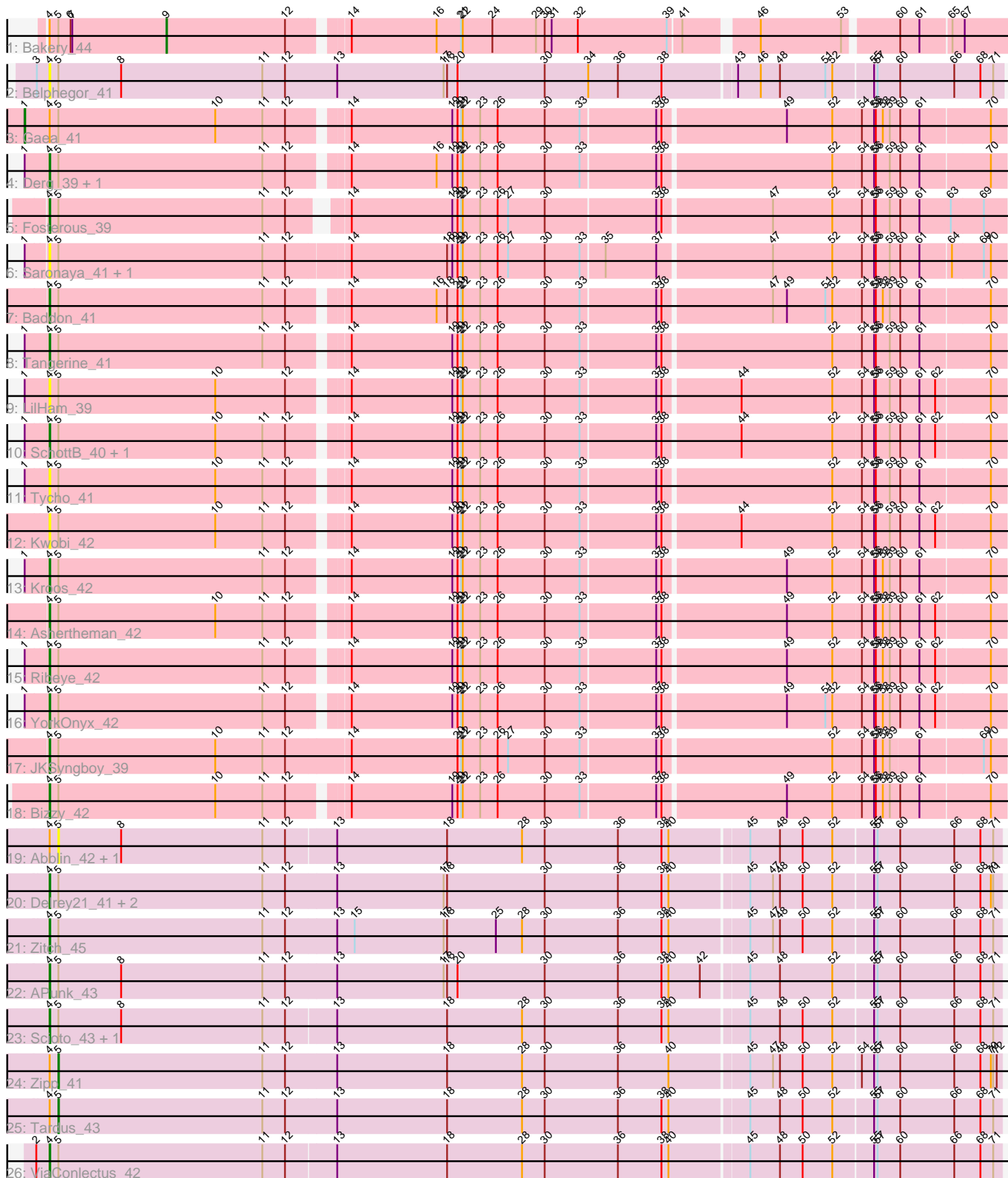


Pham 163802



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 163802 Report

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

Pham number 163802 has 33 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Bakery_44
- Track 2 : Belphegor_41
- Track 3 : Gaea_41
- Track 4 : Derg_39, Flatwoods_42
- Track 5 : Fosterous_39
- Track 6 : Saronaya_41, Gustavo_41
- Track 7 : Baddon_41
- Track 8 : Tangerine_41
- Track 9 : LilHam_39
- Track 10 : SchottB_40, Baumdotcom_40
- Track 11 : Tycho_41
- Track 12 : Kwobi_42
- Track 13 : Kroos_42
- Track 14 : Ashertheman_42
- Track 15 : Ribeye_42
- Track 16 : YorkOnyx_42
- Track 17 : JKSyngboy_39
- Track 18 : Bizzy_42
- Track 19 : Abblin_42, Natkenzie_42
- Track 20 : Delrey21_41, Verity_41, DoctorFroggo_41
- Track 21 : Zitch_45
- Track 22 : APunk_43
- Track 23 : Scioto_43, Sampson_42
- Track 24 : Zipp_41
- Track 25 : Tardus_43
- Track 26 : ViaConlectus_42

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

The start number called the most often in the published annotations is 4, it was called in 18 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- APunk_43, Ashertheman_42, Baddon_41, Baumdotcom_40, Belphegor_41, Bizzy_42, Delrey21_41, Derg_39, DoctorFroggo_41, Flatwoods_42, Fosterous_39, Gustavo_41, JKSyngboy_39, Kroos_42, Kwobi_42, LilHam_39, Ribeye_42, Sampson_42, Saronaya_41, SchottB_40, Scioto_43, Tangerine_41, Tycho_41, Verity_41, ViaConlectus_42, YorkOnyx_42, Zitch_45,

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

- Abblin_42, Bakery_44, Gaea_41, Natkenzie_42, Tardus_43, Zipp_41,

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

-

Summary by start number:

Start 1:

- Found in 13 of 33 (39.4%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Gaea_41 (DE1),

Start 4:

- Found in 33 of 33 (100.0%) of genes in pham
- Manual Annotations of this start: 18 of 22
- Called 81.8% of time when present
- Phage (with cluster) where this start called: APunk_43 (DE4), Ashertheman_42 (DE1), Baddon_41 (DE1), Baumdotcom_40 (DE1), Belphegor_41 (DE), Bizzy_42 (DE1), Delrey21_41 (DE4), Derg_39 (DE1), DoctorFroggo_41 (DE4), Flatwoods_42 (DE1), Fosterous_39 (DE1), Gustavo_41 (DE1), JKSyngboy_39 (DE1), Kroos_42 (DE1), Kwobi_42 (DE1), LilHam_39 (DE1), Ribeye_42 (DE1), Sampson_42 (DE4), Saronaya_41 (DE1), SchottB_40 (DE1), Scioto_43 (DE4), Tangerine_41 (DE1), Tycho_41 (DE1), Verity_41 (DE4), ViaConlectus_42 (DE4), YorkOnyx_42 (DE1), Zitch_45 (DE4),

Start 5:

- Found in 33 of 33 (100.0%) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 12.1% of time when present
- Phage (with cluster) where this start called: Abblin_42 (DE4), Natkenzie_42 (DE4), Tardus_43 (DE4), Zipp_41 (DE4),

Start 9:

- Found in 1 of 33 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bakery_44 (DC1),

Summary by clusters:

There are 4 clusters represented in this pham: DE1, DE, DE4, DC1,

Info for manual annotations of cluster DC1:

- Start number 9 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DE1:

- Start number 1 was manually annotated 1 time for cluster DE1.
- Start number 4 was manually annotated 11 times for cluster DE1.

Info for manual annotations of cluster DE4:

- Start number 4 was manually annotated 7 times for cluster DE4.
- Start number 5 was manually annotated 2 times for cluster DE4.

Gene Information:

Gene: APunk_43 Start: 37152, Stop: 38765, Start Num: 4

Candidate Starts for APunk_43:

(Start: 4 @37152 has 18 MA's), (Start: 5 @37167 has 2 MA's), (8, 37275), (11, 37518), (12, 37557), (13, 37644), (17, 37827), (18, 37833), (20, 37851), (30, 38001), (36, 38127), (38, 38202), (40, 38214), (42, 38268), (45, 38343), (48, 38394), (52, 38484), (55, 38550), (57, 38556), (60, 38592), (66, 38685), (68, 38730), (71, 38751),

Gene: Abblin_42 Start: 37710, Stop: 39302, Start Num: 5

Candidate Starts for Abblin_42:

(Start: 4 @37695 has 18 MA's), (Start: 5 @37710 has 2 MA's), (8, 37818), (11, 38061), (12, 38100), (13, 38181), (18, 38370), (28, 38499), (30, 38538), (36, 38664), (38, 38739), (40, 38751), (45, 38880), (48, 38931), (50, 38970), (52, 39021), (55, 39087), (57, 39093), (60, 39129), (66, 39222), (68, 39267), (71, 39288),

Gene: Ashertheman_42 Start: 36687, Stop: 38270, Start Num: 4

Candidate Starts for Ashertheman_42:

(Start: 4 @36687 has 18 MA's), (Start: 5 @36702 has 2 MA's), (10, 36972), (11, 37053), (12, 37092), (14, 37176), (19, 37347), (20, 37356), (21, 37362), (22, 37365), (23, 37395), (26, 37425), (30, 37506), (33, 37566), (37, 37692), (38, 37701), (49, 37905), (52, 37983), (54, 38031), (55, 38052), (56, 38055), (58, 38067), (59, 38079), (60, 38094), (61, 38127), (62, 38154), (70, 38244),

Gene: Baddon_41 Start: 37222, Stop: 38805, Start Num: 4

Candidate Starts for Baddon_41:

(Start: 4 @37222 has 18 MA's), (Start: 5 @37237 has 2 MA's), (11, 37588), (12, 37627), (14, 37711), (16, 37855), (18, 37873), (20, 37891), (21, 37897), (22, 37900), (23, 37930), (26, 37960), (30, 38041), (33, 38101), (37, 38227), (38, 38236), (47, 38416), (49, 38440), (51, 38506), (52, 38518), (54, 38566), (55, 38587), (56, 38590), (58, 38602), (59, 38614), (60, 38629), (61, 38662), (70, 38779),

Gene: Bakery_44 Start: 34687, Stop: 36054, Start Num: 9

Candidate Starts for Bakery_44:

(Start: 4 @34486 has 18 MA's), (Start: 5 @34501 has 2 MA's), (6, 34522), (7, 34525), (Start: 9 @34687 has 1 MA's), (12, 34891), (14, 34975), (16, 35119), (21, 35161), (22, 35164), (24, 35215), (29, 35290), (30, 35305), (31, 35317), (32, 35362), (39, 35515), (41, 35536), (46, 35647), (53, 35785), (60, 35869), (61, 35902), (65, 35953), (67, 35974),

Gene: Baumdotcom_40 Start: 36074, Stop: 37657, Start Num: 4

Candidate Starts for Baumdotcom_40:

(Start: 1 @36035 has 1 MA's), (Start: 4 @36074 has 18 MA's), (Start: 5 @36089 has 2 MA's), (10, 36359), (11, 36440), (12, 36479), (14, 36563), (19, 36734), (20, 36743), (21, 36749), (22, 36752), (23, 36782), (26, 36812), (30, 36893), (33, 36953), (37, 37079), (38, 37088), (44, 37214), (52, 37370), (54,

37418), (55, 37439), (56, 37442), (59, 37466), (60, 37481), (61, 37514), (62, 37541), (70, 37631),

Gene: Belphegor_41 Start: 37453, Stop: 39072, Start Num: 4

Candidate Starts for Belphegor_41:

(3, 37432), (Start: 4 @37453 has 18 MA's), (Start: 5 @37468 has 2 MA's), (8, 37576), (11, 37819), (12, 37858), (13, 37948), (17, 38131), (18, 38137), (20, 38155), (30, 38305), (34, 38380), (36, 38431), (38, 38506), (43, 38626), (46, 38665), (48, 38698), (51, 38776), (52, 38788), (55, 38854), (57, 38860), (60, 38896), (66, 38989), (68, 39034), (71, 39055),

Gene: Bizzy_42 Start: 36382, Stop: 37965, Start Num: 4

Candidate Starts for Bizzy_42:

(Start: 4 @36382 has 18 MA's), (Start: 5 @36397 has 2 MA's), (10, 36667), (11, 36748), (12, 36787), (14, 36871), (19, 37042), (20, 37051), (21, 37057), (22, 37060), (23, 37090), (26, 37120), (30, 37201), (33, 37261), (37, 37387), (38, 37396), (49, 37600), (52, 37678), (54, 37726), (55, 37747), (56, 37750), (58, 37762), (59, 37774), (60, 37789), (61, 37822), (70, 37939),

Gene: Delrey21_41 Start: 37882, Stop: 39492, Start Num: 4

Candidate Starts for Delrey21_41:

(Start: 4 @37882 has 18 MA's), (Start: 5 @37897 has 2 MA's), (11, 38248), (12, 38287), (13, 38371), (17, 38554), (18, 38560), (30, 38728), (36, 38854), (38, 38929), (40, 38941), (45, 39070), (47, 39109), (48, 39121), (50, 39160), (52, 39211), (55, 39277), (57, 39283), (60, 39319), (66, 39412), (68, 39457), (70, 39475), (71, 39478),

Gene: Derg_39 Start: 35972, Stop: 37555, Start Num: 4

Candidate Starts for Derg_39:

(Start: 1 @35933 has 1 MA's), (Start: 4 @35972 has 18 MA's), (Start: 5 @35987 has 2 MA's), (11, 36338), (12, 36377), (14, 36461), (16, 36605), (19, 36632), (20, 36641), (21, 36647), (22, 36650), (23, 36680), (26, 36710), (30, 36791), (33, 36851), (37, 36977), (38, 36986), (52, 37268), (54, 37316), (55, 37337), (56, 37340), (59, 37364), (60, 37379), (61, 37412), (70, 37529),

Gene: DoctorFroggo_41 Start: 37882, Stop: 39492, Start Num: 4

Candidate Starts for DoctorFroggo_41:

(Start: 4 @37882 has 18 MA's), (Start: 5 @37897 has 2 MA's), (11, 38248), (12, 38287), (13, 38371), (17, 38554), (18, 38560), (30, 38728), (36, 38854), (38, 38929), (40, 38941), (45, 39070), (47, 39109), (48, 39121), (50, 39160), (52, 39211), (55, 39277), (57, 39283), (60, 39319), (66, 39412), (68, 39457), (70, 39475), (71, 39478),

Gene: Flatwoods_42 Start: 36324, Stop: 37907, Start Num: 4

Candidate Starts for Flatwoods_42:

(Start: 1 @36285 has 1 MA's), (Start: 4 @36324 has 18 MA's), (Start: 5 @36339 has 2 MA's), (11, 36690), (12, 36729), (14, 36813), (16, 36957), (19, 36984), (20, 36993), (21, 36999), (22, 37002), (23, 37032), (26, 37062), (30, 37143), (33, 37203), (37, 37329), (38, 37338), (52, 37620), (54, 37668), (55, 37689), (56, 37692), (59, 37716), (60, 37731), (61, 37764), (70, 37881),

Gene: Fosterous_39 Start: 36067, Stop: 37644, Start Num: 4

Candidate Starts for Fosterous_39:

(Start: 4 @36067 has 18 MA's), (Start: 5 @36082 has 2 MA's), (11, 36433), (12, 36472), (14, 36547), (19, 36718), (20, 36727), (21, 36733), (22, 36736), (23, 36766), (26, 36796), (27, 36814), (30, 36877), (37, 37063), (38, 37072), (47, 37252), (52, 37354), (54, 37405), (55, 37426), (56, 37429), (59, 37453), (60, 37468), (61, 37501), (63, 37552), (69, 37606),

Gene: Gaea_41 Start: 35931, Stop: 37553, Start Num: 1

Candidate Starts for Gaea_41:

(Start: 1 @35931 has 1 MA's), (Start: 4 @35970 has 18 MA's), (Start: 5 @35985 has 2 MA's), (10, 36255), (11, 36336), (12, 36375), (14, 36459), (19, 36630), (20, 36639), (21, 36645), (22, 36648), (23, 36678), (26, 36708), (30, 36789), (33, 36849), (37, 36975), (38, 36984), (49, 37188), (52, 37266), (54, 37314), (55, 37335), (56, 37338), (58, 37350), (59, 37362), (60, 37377), (61, 37410), (70, 37527),

Gene: Gustavo_41 Start: 36119, Stop: 37723, Start Num: 4

Candidate Starts for Gustavo_41:

(Start: 1 @36083 has 1 MA's), (Start: 4 @36119 has 18 MA's), (Start: 5 @36134 has 2 MA's), (11, 36485), (12, 36524), (14, 36626), (18, 36788), (19, 36797), (20, 36806), (21, 36812), (22, 36815), (23, 36845), (26, 36875), (27, 36893), (30, 36956), (33, 37016), (35, 37055), (37, 37142), (47, 37331), (52, 37433), (54, 37484), (55, 37505), (56, 37508), (59, 37532), (60, 37547), (61, 37580), (64, 37631), (69, 37685), (70, 37697),

Gene: JKSyngboy_39 Start: 36715, Stop: 38322, Start Num: 4

Candidate Starts for JKSyngboy_39:

(Start: 4 @36715 has 18 MA's), (Start: 5 @36730 has 2 MA's), (10, 37000), (11, 37081), (12, 37120), (14, 37228), (20, 37408), (21, 37414), (22, 37417), (23, 37447), (26, 37477), (27, 37495), (30, 37558), (33, 37618), (37, 37744), (38, 37753), (52, 38035), (54, 38083), (55, 38104), (56, 38107), (58, 38119), (59, 38131), (61, 38179), (69, 38284), (70, 38296),

Gene: Kroos_42 Start: 36880, Stop: 38463, Start Num: 4

Candidate Starts for Kroos_42:

(Start: 1 @36841 has 1 MA's), (Start: 4 @36880 has 18 MA's), (Start: 5 @36895 has 2 MA's), (11, 37246), (12, 37285), (14, 37369), (19, 37540), (20, 37549), (21, 37555), (22, 37558), (23, 37588), (26, 37618), (30, 37699), (33, 37759), (37, 37885), (38, 37894), (49, 38098), (52, 38176), (54, 38224), (55, 38245), (56, 38248), (58, 38260), (59, 38272), (60, 38287), (61, 38320), (70, 38437),

Gene: Kwobi_42 Start: 36866, Stop: 38449, Start Num: 4

Candidate Starts for Kwobi_42:

(Start: 4 @36866 has 18 MA's), (Start: 5 @36881 has 2 MA's), (10, 37151), (11, 37232), (12, 37271), (14, 37355), (19, 37526), (20, 37535), (21, 37541), (22, 37544), (23, 37574), (26, 37604), (30, 37685), (33, 37745), (37, 37871), (38, 37880), (44, 38006), (52, 38162), (54, 38210), (55, 38231), (56, 38234), (59, 38258), (60, 38273), (61, 38306), (62, 38333), (70, 38423),

Gene: LilHam_39 Start: 35467, Stop: 37050, Start Num: 4

Candidate Starts for LilHam_39:

(Start: 1 @35428 has 1 MA's), (Start: 4 @35467 has 18 MA's), (Start: 5 @35482 has 2 MA's), (10, 35752), (12, 35872), (14, 35956), (19, 36127), (20, 36136), (21, 36142), (22, 36145), (23, 36175), (26, 36205), (30, 36286), (33, 36346), (37, 36472), (38, 36481), (44, 36607), (52, 36763), (54, 36811), (55, 36832), (56, 36835), (59, 36859), (60, 36874), (61, 36907), (62, 36934), (70, 37024),

Gene: Natkenzie_42 Start: 37710, Stop: 39302, Start Num: 5

Candidate Starts for Natkenzie_42:

(Start: 4 @37695 has 18 MA's), (Start: 5 @37710 has 2 MA's), (8, 37818), (11, 38061), (12, 38100), (13, 38181), (18, 38370), (28, 38499), (30, 38538), (36, 38664), (38, 38739), (40, 38751), (45, 38880), (48, 38931), (50, 38970), (52, 39021), (55, 39087), (57, 39093), (60, 39129), (66, 39222), (68, 39267), (71, 39288),

Gene: Ribeye_42 Start: 37298, Stop: 38881, Start Num: 4

Candidate Starts for Ribeye_42:

(Start: 1 @37259 has 1 MA's), (Start: 4 @37298 has 18 MA's), (Start: 5 @37313 has 2 MA's), (11, 37664), (12, 37703), (14, 37787), (19, 37958), (20, 37967), (21, 37973), (22, 37976), (23, 38006), (26, 38036), (30, 38117), (33, 38177), (37, 38303), (38, 38312), (49, 38516), (52, 38594), (54, 38642), (55,

38663), (56, 38666), (58, 38678), (59, 38690), (60, 38705), (61, 38738), (62, 38765), (70, 38855),

Gene: Sampson_42 Start: 37640, Stop: 39247, Start Num: 4

Candidate Starts for Sampson_42:

(Start: 4 @37640 has 18 MA's), (Start: 5 @37655 has 2 MA's), (8, 37763), (11, 38006), (12, 38045), (13, 38126), (18, 38315), (28, 38444), (30, 38483), (36, 38609), (38, 38684), (40, 38696), (45, 38825), (48, 38876), (50, 38915), (52, 38966), (55, 39032), (57, 39038), (60, 39074), (66, 39167), (68, 39212), (71, 39233),

Gene: Saronaya_41 Start: 36119, Stop: 37723, Start Num: 4

Candidate Starts for Saronaya_41:

(Start: 1 @36083 has 1 MA's), (Start: 4 @36119 has 18 MA's), (Start: 5 @36134 has 2 MA's), (11, 36485), (12, 36524), (14, 36626), (18, 36788), (19, 36797), (20, 36806), (21, 36812), (22, 36815), (23, 36845), (26, 36875), (27, 36893), (30, 36956), (33, 37016), (35, 37055), (37, 37142), (47, 37331), (52, 37433), (54, 37484), (55, 37505), (56, 37508), (59, 37532), (60, 37547), (61, 37580), (64, 37631), (69, 37685), (70, 37697),

Gene: SchottB_40 Start: 37140, Stop: 38723, Start Num: 4

Candidate Starts for SchottB_40:

(Start: 1 @37101 has 1 MA's), (Start: 4 @37140 has 18 MA's), (Start: 5 @37155 has 2 MA's), (10, 37425), (11, 37506), (12, 37545), (14, 37629), (19, 37800), (20, 37809), (21, 37815), (22, 37818), (23, 37848), (26, 37878), (30, 37959), (33, 38019), (37, 38145), (38, 38154), (44, 38280), (52, 38436), (54, 38484), (55, 38505), (56, 38508), (59, 38532), (60, 38547), (61, 38580), (62, 38607), (70, 38697),

Gene: Scioto_43 Start: 37696, Stop: 39303, Start Num: 4

Candidate Starts for Scioto_43:

(Start: 4 @37696 has 18 MA's), (Start: 5 @37711 has 2 MA's), (8, 37819), (11, 38062), (12, 38101), (13, 38182), (18, 38371), (28, 38500), (30, 38539), (36, 38665), (38, 38740), (40, 38752), (45, 38881), (48, 38932), (50, 38971), (52, 39022), (55, 39088), (57, 39094), (60, 39130), (66, 39223), (68, 39268), (71, 39289),

Gene: Tangerine_41 Start: 36012, Stop: 37595, Start Num: 4

Candidate Starts for Tangerine_41:

(Start: 1 @35973 has 1 MA's), (Start: 4 @36012 has 18 MA's), (Start: 5 @36027 has 2 MA's), (11, 36378), (12, 36417), (14, 36501), (19, 36672), (20, 36681), (21, 36687), (22, 36690), (23, 36720), (26, 36750), (30, 36831), (33, 36891), (37, 37017), (38, 37026), (52, 37308), (54, 37356), (55, 37377), (56, 37380), (59, 37404), (60, 37419), (61, 37452), (70, 37569),

Gene: Tardus_43 Start: 37065, Stop: 38660, Start Num: 5

Candidate Starts for Tardus_43:

(Start: 4 @37050 has 18 MA's), (Start: 5 @37065 has 2 MA's), (11, 37416), (12, 37455), (13, 37539), (18, 37728), (28, 37857), (30, 37896), (36, 38022), (38, 38097), (40, 38109), (45, 38238), (48, 38289), (50, 38328), (52, 38379), (55, 38445), (57, 38451), (60, 38487), (66, 38580), (68, 38625), (71, 38646),

Gene: Tycho_41 Start: 36099, Stop: 37682, Start Num: 4

Candidate Starts for Tycho_41:

(Start: 1 @36060 has 1 MA's), (Start: 4 @36099 has 18 MA's), (Start: 5 @36114 has 2 MA's), (10, 36384), (11, 36465), (12, 36504), (14, 36588), (19, 36759), (20, 36768), (21, 36774), (22, 36777), (23, 36807), (26, 36837), (30, 36918), (33, 36978), (37, 37104), (38, 37113), (52, 37395), (54, 37443), (55, 37464), (56, 37467), (59, 37491), (60, 37506), (61, 37539), (70, 37656),

Gene: Verity_41 Start: 37882, Stop: 39492, Start Num: 4

Candidate Starts for Verity_41:

(Start: 4 @37882 has 18 MA's), (Start: 5 @37897 has 2 MA's), (11, 38248), (12, 38287), (13, 38371), (17, 38554), (18, 38560), (30, 38728), (36, 38854), (38, 38929), (40, 38941), (45, 39070), (47, 39109), (48, 39121), (50, 39160), (52, 39211), (55, 39277), (57, 39283), (60, 39319), (66, 39412), (68, 39457), (70, 39475), (71, 39478),

Gene: ViaConlectus_42 Start: 36330, Stop: 37937, Start Num: 4

Candidate Starts for ViaConlectus_42:

(2, 36312), (Start: 4 @36330 has 18 MA's), (Start: 5 @36345 has 2 MA's), (11, 36696), (12, 36735), (13, 36816), (18, 37005), (28, 37134), (30, 37173), (36, 37299), (38, 37374), (40, 37386), (45, 37515), (48, 37566), (50, 37605), (52, 37656), (55, 37722), (57, 37728), (60, 37764), (66, 37857), (68, 37902), (71, 37923),

Gene: YorkOnyx_42 Start: 36358, Stop: 37941, Start Num: 4

Candidate Starts for YorkOnyx_42:

(Start: 1 @36319 has 1 MA's), (Start: 4 @36358 has 18 MA's), (Start: 5 @36373 has 2 MA's), (11, 36724), (12, 36763), (14, 36847), (19, 37018), (20, 37027), (21, 37033), (22, 37036), (23, 37066), (26, 37096), (30, 37177), (33, 37237), (37, 37363), (38, 37372), (49, 37576), (51, 37642), (52, 37654), (54, 37702), (55, 37723), (56, 37726), (58, 37738), (59, 37750), (60, 37765), (61, 37798), (62, 37825), (70, 37915),

Gene: Zipp_41 Start: 37800, Stop: 39395, Start Num: 5

Candidate Starts for Zipp_41:

(Start: 4 @37785 has 18 MA's), (Start: 5 @37800 has 2 MA's), (11, 38151), (12, 38190), (13, 38274), (18, 38463), (28, 38592), (30, 38631), (36, 38757), (40, 38844), (45, 38973), (47, 39012), (48, 39024), (50, 39063), (52, 39114), (54, 39159), (55, 39180), (57, 39186), (60, 39222), (66, 39315), (68, 39360), (70, 39378), (71, 39381), (72, 39387),

Gene: Zitch_45 Start: 36483, Stop: 38093, Start Num: 4

Candidate Starts for Zitch_45:

(Start: 4 @36483 has 18 MA's), (Start: 5 @36498 has 2 MA's), (11, 36849), (12, 36888), (13, 36972), (15, 37002), (17, 37155), (18, 37161), (25, 37245), (28, 37290), (30, 37329), (36, 37455), (38, 37530), (40, 37542), (45, 37671), (47, 37710), (48, 37722), (50, 37761), (52, 37812), (55, 37878), (57, 37884), (60, 37920), (66, 38013), (68, 38058), (71, 38079),