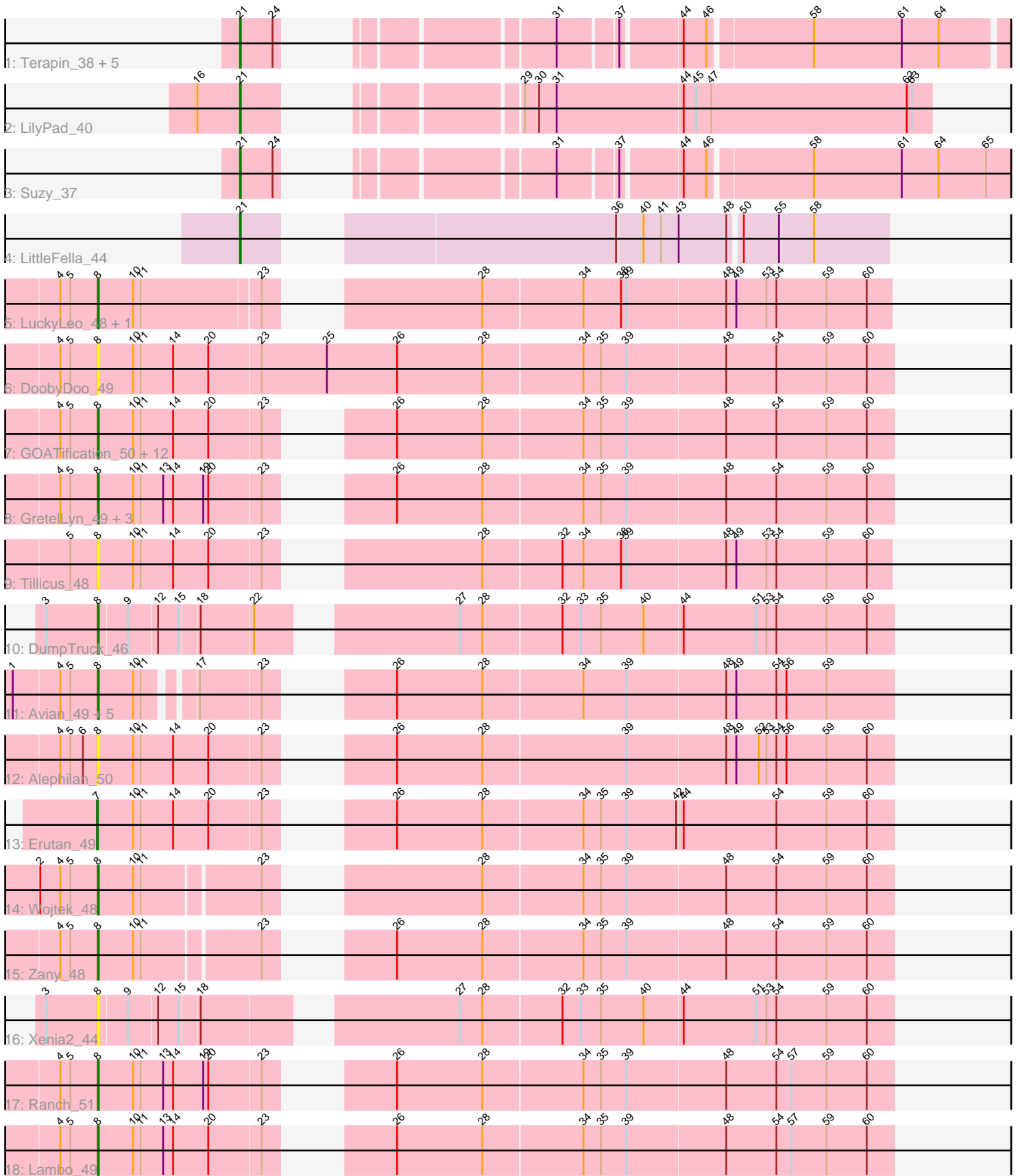


Pham 165135



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 165135 Report

This analysis was run 07/09/24 on database version 566.

Pham number 165135 has 44 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Terapin_38, Sienna_37, Djokovic_37, BiteSize_37, Beyonccage_37, Madi_37
- Track 2 : LilyPad_40
- Track 3 : Suzy_37
- Track 4 : LittleFella_44
- Track 5 : LuckyLeo_48, Apeppi_46
- Track 6 : DoobyDoo_49
- Track 7 : GOATification_50, DaviePasture_52, Patos_52, NorManre_52, ParvusTarda_49, Fulcrum_50, Yikes_51, BirthdayBoy_52, Gibbin_51, Mima20_51, Sampudon_50, Jalebi_49, MoiGyank_57
- Track 8 : GretelLyn_49, OtterstedtS21_49, Sadboi_50, Lila22_53
- Track 9 : Tillicus_48
- Track 10 : DumpTruck_46
- Track 11 : Avian_49, NovaSharks_51, Rumi_50, Alyssamiracle_52, Genamy16_52, Jamemuya19_51
- Track 12 : Alephilan_50
- Track 13 : Erutan_49
- Track 14 : Wojtek_48
- Track 15 : Zany_48
- Track 16 : Xenia2_44
- Track 17 : Ranch_51
- Track 18 : Lambo_49

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

The start number called the most often in the published annotations is 8, it was called in 23 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alephilan_50, Alyssamiracle_52, Apeppi_46, Avian_49, BirthdayBoy_52, DaviePasture_52, DoobyDoo_49, DumpTruck_46, Fulcrum_50, GOATification_50, Genamy16_52, Gibbin_51, GretelLyn_49, Jalebi_49, Jamemuya19_51, Lambo_49, Lila22_53, LuckyLeo_48, Mima20_51, MoiGyank_57, NorManre_52, NovaSharks_51, OtterstedtS21_49, ParvusTarda_49, Patos_52, Ranch_51, Rumi_50, Sadboi_50,

Sampudon_50, Tillicus_48, Wojtek_48, Xenia2_44, Yikes_51, Zany_48,

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

-

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

- Beyoncage_37, BiteSize_37, Djokovic_37, Erutan_49, LilyPad_40, LittleFella_44, Madi_37, Sienna_37, Suzy_37, Terapin_38,

Summary by start number:

Start 7:

- Found in 1 of 44 (2.3%) 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: Erutan_49 (DV),

Start 8:

- Found in 34 of 44 (77.3%) of genes in pham
- Manual Annotations of this start: 23 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alephilan_50 (DV), Alyssamiracle_52 (DV), Apeppi_46 (DV), Avian_49 (DV), BirthdayBoy_52 (DV), DaviePasture_52 (DV), DoobyDoo_49 (DV), DumpTruck_46 (DV), Fulcrum_50 (DV), GOATification_50 (DV), Genamy16_52 (DV), Gibbin_51 (DV), GretelLyn_49 (DV), Jalebi_49 (DV), Jamemuya19_51 (DV), Lambo_49 (DV), Lila22_53 (DV), LuckyLeo_48 (DV), Mima20_51 (DV), MoiGyank_57 (DV), NorManre_52 (DV), NovaSharks_51 (DV), OtterstedtS21_49 (DV), ParvusTarda_49 (DV), Patos_52 (DV), Ranch_51 (DV), Rumi_50 (DV), Sadboi_50 (DV), Sampudon_50 (DV), Tillicus_48 (DV), Wojtek_48 (DV), Xenia2_44 (DV), Yikes_51 (DV), Zany_48 (DV),

Start 21:

- Found in 9 of 44 (20.5%) of genes in pham
- Manual Annotations of this start: 9 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beyoncage_37 (DG1), BiteSize_37 (DG1), Djokovic_37 (DG1), LilyPad_40 (DG1), LittleFella_44 (DG2), Madi_37 (DG1), Sienna_37 (DG1), Suzy_37 (DG1), Terapin_38 (DG1),

Summary by clusters:

There are 3 clusters represented in this pham: DV, DG2, DG1,

Info for manual annotations of cluster DG1:

- Start number 21 was manually annotated 8 times for cluster DG1.

Info for manual annotations of cluster DG2:

- Start number 21 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DV:

- Start number 7 was manually annotated 1 time for cluster DV.
- Start number 8 was manually annotated 23 times for cluster DV.

Gene Information:

Gene: Alephilan_50 Start: 36707, Stop: 37567, Start Num: 8

Candidate Starts for Alephilan_50:

(4, 36662), (5, 36674), (6, 36689), (Start: 8 @36707 has 23 MA's), (10, 36749), (11, 36758), (14, 36797), (20, 36839), (23, 36899), (26, 36983), (28, 37085), (39, 37250), (48, 37367), (49, 37379), (52, 37406), (53, 37415), (54, 37427), (56, 37439), (59, 37487), (60, 37535),

Gene: Alyssamiracle_52 Start: 36033, Stop: 36866, Start Num: 8

Candidate Starts for Alyssamiracle_52:

(1, 35934), (4, 35988), (5, 36000), (Start: 8 @36033 has 23 MA's), (10, 36075), (11, 36084), (17, 36129), (23, 36198), (26, 36282), (28, 36384), (34, 36498), (39, 36549), (48, 36666), (49, 36678), (54, 36726), (56, 36738), (59, 36786),

Gene: Apeppi_46 Start: 36209, Stop: 37057, Start Num: 8

Candidate Starts for Apeppi_46:

(4, 36164), (5, 36176), (Start: 8 @36209 has 23 MA's), (10, 36251), (11, 36260), (23, 36392), (28, 36578), (34, 36692), (38, 36737), (39, 36743), (48, 36860), (49, 36872), (53, 36908), (54, 36920), (59, 36980), (60, 37028),

Gene: Avian_49 Start: 35761, Stop: 36594, Start Num: 8

Candidate Starts for Avian_49:

(1, 35662), (4, 35716), (5, 35728), (Start: 8 @35761 has 23 MA's), (10, 35803), (11, 35812), (17, 35857), (23, 35926), (26, 36010), (28, 36112), (34, 36226), (39, 36277), (48, 36394), (49, 36406), (54, 36454), (56, 36466), (59, 36514),

Gene: Beyoncage_37 Start: 31421, Stop: 32200, Start Num: 21

Candidate Starts for Beyoncage_37:

(Start: 21 @31421 has 9 MA's), (24, 31460), (31, 31679), (37, 31742), (44, 31808), (46, 31835), (58, 31952), (61, 32057), (64, 32099),

Gene: BirthdayBoy_52 Start: 37410, Stop: 38270, Start Num: 8

Candidate Starts for BirthdayBoy_52:

(4, 37365), (5, 37377), (Start: 8 @37410 has 23 MA's), (10, 37452), (11, 37461), (14, 37500), (20, 37542), (23, 37602), (26, 37686), (28, 37788), (34, 37902), (35, 37923), (39, 37953), (48, 38070), (54, 38130), (59, 38190), (60, 38238),

Gene: BiteSize_37 Start: 31507, Stop: 32286, Start Num: 21

Candidate Starts for BiteSize_37:

(Start: 21 @31507 has 9 MA's), (24, 31546), (31, 31765), (37, 31828), (44, 31894), (46, 31921), (58, 32038), (61, 32143), (64, 32185),

Gene: DaviePasture_52 Start: 37051, Stop: 37911, Start Num: 8

Candidate Starts for DaviePasture_52:

(4, 37006), (5, 37018), (Start: 8 @37051 has 23 MA's), (10, 37093), (11, 37102), (14, 37141), (20, 37183), (23, 37243), (26, 37327), (28, 37429), (34, 37543), (35, 37564), (39, 37594), (48, 37711), (54, 37771), (59, 37831), (60, 37879),

Gene: Djokovic_37 Start: 31420, Stop: 32199, Start Num: 21

Candidate Starts for Djokovic_37:

(Start: 21 @31420 has 9 MA's), (24, 31459), (31, 31678), (37, 31741), (44, 31807), (46, 31834), (58, 31951), (61, 32056), (64, 32098),

Gene: DoobyDoo_49 Start: 35865, Stop: 36803, Start Num: 8

Candidate Starts for DoobyDoo_49:

(4, 35820), (5, 35832), (Start: 8 @35865 has 23 MA's), (10, 35907), (11, 35916), (14, 35955), (20, 35997), (23, 36057), (25, 36135), (26, 36219), (28, 36321), (34, 36435), (35, 36456), (39, 36486), (48, 36603), (54, 36663), (59, 36723), (60, 36771),

Gene: DumpTruck_46 Start: 35046, Stop: 35921, Start Num: 8

Candidate Starts for DumpTruck_46:

(3, 34986), (Start: 8 @35046 has 23 MA's), (9, 35079), (12, 35112), (15, 35136), (18, 35157), (22, 35217), (27, 35412), (28, 35439), (32, 35529), (33, 35550), (35, 35574), (40, 35625), (44, 35670), (51, 35757), (53, 35769), (54, 35781), (59, 35841), (60, 35889),

Gene: Erutan_49 Start: 36477, Stop: 37337, Start Num: 7

Candidate Starts for Erutan_49:

(Start: 7 @36477 has 1 MA's), (10, 36519), (11, 36528), (14, 36567), (20, 36609), (23, 36669), (26, 36753), (28, 36855), (34, 36969), (35, 36990), (39, 37020), (42, 37080), (44, 37086), (54, 37197), (59, 37257), (60, 37305),

Gene: Fulcrum_50 Start: 36704, Stop: 37564, Start Num: 8

Candidate Starts for Fulcrum_50:

(4, 36659), (5, 36671), (Start: 8 @36704 has 23 MA's), (10, 36746), (11, 36755), (14, 36794), (20, 36836), (23, 36896), (26, 36980), (28, 37082), (34, 37196), (35, 37217), (39, 37247), (48, 37364), (54, 37424), (59, 37484), (60, 37532),

Gene: GOATification_50 Start: 36704, Stop: 37564, Start Num: 8

Candidate Starts for GOATification_50:

(4, 36659), (5, 36671), (Start: 8 @36704 has 23 MA's), (10, 36746), (11, 36755), (14, 36794), (20, 36836), (23, 36896), (26, 36980), (28, 37082), (34, 37196), (35, 37217), (39, 37247), (48, 37364), (54, 37424), (59, 37484), (60, 37532),

Gene: Genamy16_52 Start: 36019, Stop: 36852, Start Num: 8

Candidate Starts for Genamy16_52:

(1, 35920), (4, 35974), (5, 35986), (Start: 8 @36019 has 23 MA's), (10, 36061), (11, 36070), (17, 36115), (23, 36184), (26, 36268), (28, 36370), (34, 36484), (39, 36535), (48, 36652), (49, 36664), (54, 36712), (56, 36724), (59, 36772),

Gene: Gibbin_51 Start: 37360, Stop: 38220, Start Num: 8

Candidate Starts for Gibbin_51:

(4, 37315), (5, 37327), (Start: 8 @37360 has 23 MA's), (10, 37402), (11, 37411), (14, 37450), (20, 37492), (23, 37552), (26, 37636), (28, 37738), (34, 37852), (35, 37873), (39, 37903), (48, 38020), (54, 38080), (59, 38140), (60, 38188),

Gene: Gretellyn_49 Start: 37434, Stop: 38294, Start Num: 8

Candidate Starts for Gretellyn_49:

(4, 37389), (5, 37401), (Start: 8 @37434 has 23 MA's), (10, 37476), (11, 37485), (13, 37512), (14, 37524), (19, 37560), (20, 37566), (23, 37626), (26, 37710), (28, 37812), (34, 37926), (35, 37947), (39, 37977), (48, 38094), (54, 38154), (59, 38214), (60, 38262),

Gene: Jalebi_49 Start: 37779, Stop: 38639, Start Num: 8

Candidate Starts for Jalebi_49:

(4, 37734), (5, 37746), (Start: 8 @37779 has 23 MA's), (10, 37821), (11, 37830), (14, 37869), (20, 37911), (23, 37971), (26, 38055), (28, 38157), (34, 38271), (35, 38292), (39, 38322), (48, 38439), (54, 38499), (59, 38559), (60, 38607),

Gene: Jamemuya19_51 Start: 35624, Stop: 36457, Start Num: 8

Candidate Starts for Jamemuya19_51:

(1, 35525), (4, 35579), (5, 35591), (Start: 8 @35624 has 23 MA's), (10, 35666), (11, 35675), (17, 35720), (23, 35789), (26, 35873), (28, 35975), (34, 36089), (39, 36140), (48, 36257), (49, 36269), (54, 36317), (56, 36329), (59, 36377),

Gene: Lambo_49 Start: 36805, Stop: 37665, Start Num: 8

Candidate Starts for Lambo_49:

(4, 36760), (5, 36772), (Start: 8 @36805 has 23 MA's), (10, 36847), (11, 36856), (13, 36883), (14, 36895), (20, 36937), (23, 36997), (26, 37081), (28, 37183), (34, 37297), (35, 37318), (39, 37348), (48, 37465), (54, 37525), (57, 37543), (59, 37585), (60, 37633),

Gene: Lila22_53 Start: 37402, Stop: 38262, Start Num: 8

Candidate Starts for Lila22_53:

(4, 37357), (5, 37369), (Start: 8 @37402 has 23 MA's), (10, 37444), (11, 37453), (13, 37480), (14, 37492), (19, 37528), (20, 37534), (23, 37594), (26, 37678), (28, 37780), (34, 37894), (35, 37915), (39, 37945), (48, 38062), (54, 38122), (59, 38182), (60, 38230),

Gene: LilyPad_40 Start: 32787, Stop: 33488, Start Num: 21

Candidate Starts for LilyPad_40:

(16, 32736), (Start: 21 @32787 has 9 MA's), (29, 33009), (30, 33024), (31, 33045), (44, 33192), (45, 33207), (47, 33225), (62, 33459), (63, 33465),

Gene: LittleFella_44 Start: 34392, Stop: 35063, Start Num: 21

Candidate Starts for LittleFella_44:

(Start: 21 @34392 has 9 MA's), (36, 34752), (40, 34782), (41, 34803), (43, 34824), (48, 34881), (50, 34893), (55, 34935), (58, 34974),

Gene: LuckyLeo_48 Start: 36209, Stop: 37057, Start Num: 8

Candidate Starts for LuckyLeo_48:

(4, 36164), (5, 36176), (Start: 8 @36209 has 23 MA's), (10, 36251), (11, 36260), (23, 36392), (28, 36578), (34, 36692), (38, 36737), (39, 36743), (48, 36860), (49, 36872), (53, 36908), (54, 36920), (59, 36980), (60, 37028),

Gene: Madi_37 Start: 31498, Stop: 32277, Start Num: 21

Candidate Starts for Madi_37:

(Start: 21 @31498 has 9 MA's), (24, 31537), (31, 31756), (37, 31819), (44, 31885), (46, 31912), (58, 32029), (61, 32134), (64, 32176),

Gene: Mima20_51 Start: 36951, Stop: 37811, Start Num: 8

Candidate Starts for Mima20_51:

(4, 36906), (5, 36918), (Start: 8 @36951 has 23 MA's), (10, 36993), (11, 37002), (14, 37041), (20, 37083), (23, 37143), (26, 37227), (28, 37329), (34, 37443), (35, 37464), (39, 37494), (48, 37611), (54, 37671), (59, 37731), (60, 37779),

Gene: MoiGyank_57 Start: 37848, Stop: 38708, Start Num: 8

Candidate Starts for MoiGyank_57:

(4, 37803), (5, 37815), (Start: 8 @37848 has 23 MA's), (10, 37890), (11, 37899), (14, 37938), (20, 37980), (23, 38040), (26, 38124), (28, 38226), (34, 38340), (35, 38361), (39, 38391), (48, 38508), (54,

38568), (59, 38628), (60, 38676),

Gene: NorManre_52 Start: 37060, Stop: 37920, Start Num: 8

Candidate Starts for NorManre_52:

(4, 37015), (5, 37027), (Start: 8 @37060 has 23 MA's), (10, 37102), (11, 37111), (14, 37150), (20, 37192), (23, 37252), (26, 37336), (28, 37438), (34, 37552), (35, 37573), (39, 37603), (48, 37720), (54, 37780), (59, 37840), (60, 37888),

Gene: NovaSharks_51 Start: 35610, Stop: 36443, Start Num: 8

Candidate Starts for NovaSharks_51:

(1, 35511), (4, 35565), (5, 35577), (Start: 8 @35610 has 23 MA's), (10, 35652), (11, 35661), (17, 35706), (23, 35775), (26, 35859), (28, 35961), (34, 36075), (39, 36126), (48, 36243), (49, 36255), (54, 36303), (56, 36315), (59, 36363),

Gene: OtterstedtS21_49 Start: 36720, Stop: 37580, Start Num: 8

Candidate Starts for OtterstedtS21_49:

(4, 36675), (5, 36687), (Start: 8 @36720 has 23 MA's), (10, 36762), (11, 36771), (13, 36798), (14, 36810), (19, 36846), (20, 36852), (23, 36912), (26, 36996), (28, 37098), (34, 37212), (35, 37233), (39, 37263), (48, 37380), (54, 37440), (59, 37500), (60, 37548),

Gene: ParvusTarda_49 Start: 36222, Stop: 37082, Start Num: 8

Candidate Starts for ParvusTarda_49:

(4, 36177), (5, 36189), (Start: 8 @36222 has 23 MA's), (10, 36264), (11, 36273), (14, 36312), (20, 36354), (23, 36414), (26, 36498), (28, 36600), (34, 36714), (35, 36735), (39, 36765), (48, 36882), (54, 36942), (59, 37002), (60, 37050),

Gene: Patos_52 Start: 37059, Stop: 37919, Start Num: 8

Candidate Starts for Patos_52:

(4, 37014), (5, 37026), (Start: 8 @37059 has 23 MA's), (10, 37101), (11, 37110), (14, 37149), (20, 37191), (23, 37251), (26, 37335), (28, 37437), (34, 37551), (35, 37572), (39, 37602), (48, 37719), (54, 37779), (59, 37839), (60, 37887),

Gene: Ranch_51 Start: 35892, Stop: 36752, Start Num: 8

Candidate Starts for Ranch_51:

(4, 35847), (5, 35859), (Start: 8 @35892 has 23 MA's), (10, 35934), (11, 35943), (13, 35970), (14, 35982), (19, 36018), (20, 36024), (23, 36084), (26, 36168), (28, 36270), (34, 36384), (35, 36405), (39, 36435), (48, 36552), (54, 36612), (57, 36630), (59, 36672), (60, 36720),

Gene: Rumi_50 Start: 35307, Stop: 36140, Start Num: 8

Candidate Starts for Rumi_50:

(1, 35208), (4, 35262), (5, 35274), (Start: 8 @35307 has 23 MA's), (10, 35349), (11, 35358), (17, 35403), (23, 35472), (26, 35556), (28, 35658), (34, 35772), (39, 35823), (48, 35940), (49, 35952), (54, 36000), (56, 36012), (59, 36060),

Gene: Sadboi_50 Start: 37435, Stop: 38295, Start Num: 8

Candidate Starts for Sadboi_50:

(4, 37390), (5, 37402), (Start: 8 @37435 has 23 MA's), (10, 37477), (11, 37486), (13, 37513), (14, 37525), (19, 37561), (20, 37567), (23, 37627), (26, 37711), (28, 37813), (34, 37927), (35, 37948), (39, 37978), (48, 38095), (54, 38155), (59, 38215), (60, 38263),

Gene: Sampudon_50 Start: 37779, Stop: 38639, Start Num: 8

Candidate Starts for Sampudon_50:

(4, 37734), (5, 37746), (Start: 8 @37779 has 23 MA's), (10, 37821), (11, 37830), (14, 37869), (20, 37911), (23, 37971), (26, 38055), (28, 38157), (34, 38271), (35, 38292), (39, 38322), (48, 38439), (54, 38499), (59, 38559), (60, 38607),

Gene: Sienna_37 Start: 31498, Stop: 32277, Start Num: 21

Candidate Starts for Sienna_37:

(Start: 21 @31498 has 9 MA's), (24, 31537), (31, 31756), (37, 31819), (44, 31885), (46, 31912), (58, 32029), (61, 32134), (64, 32176),

Gene: Suzy_37 Start: 32010, Stop: 32801, Start Num: 21

Candidate Starts for Suzy_37:

(Start: 21 @32010 has 9 MA's), (24, 32049), (31, 32268), (37, 32331), (44, 32397), (46, 32424), (58, 32541), (61, 32646), (64, 32688), (65, 32745),

Gene: Terapin_38 Start: 31422, Stop: 32201, Start Num: 21

Candidate Starts for Terapin_38:

(Start: 21 @31422 has 9 MA's), (24, 31461), (31, 31680), (37, 31743), (44, 31809), (46, 31836), (58, 31953), (61, 32058), (64, 32100),

Gene: Tillicus_48 Start: 36141, Stop: 36998, Start Num: 8

Candidate Starts for Tillicus_48:

(5, 36108), (Start: 8 @36141 has 23 MA's), (10, 36183), (11, 36192), (14, 36231), (20, 36273), (23, 36333), (28, 36519), (32, 36609), (34, 36633), (38, 36678), (39, 36684), (48, 36801), (49, 36813), (53, 36849), (54, 36861), (59, 36921), (60, 36969),

Gene: Wojtek_48 Start: 36233, Stop: 37084, Start Num: 8

Candidate Starts for Wojtek_48:

(2, 36164), (4, 36188), (5, 36200), (Start: 8 @36233 has 23 MA's), (10, 36275), (11, 36284), (23, 36416), (28, 36602), (34, 36716), (35, 36737), (39, 36767), (48, 36884), (54, 36944), (59, 37004), (60, 37052),

Gene: Xenia2_44 Start: 35094, Stop: 35969, Start Num: 8

Candidate Starts for Xenia2_44:

(3, 35034), (Start: 8 @35094 has 23 MA's), (9, 35127), (12, 35160), (15, 35184), (18, 35205), (27, 35460), (28, 35487), (32, 35577), (33, 35598), (35, 35622), (40, 35673), (44, 35718), (51, 35805), (53, 35817), (54, 35829), (59, 35889), (60, 35937),

Gene: Yikes_51 Start: 37846, Stop: 38706, Start Num: 8

Candidate Starts for Yikes_51:

(4, 37801), (5, 37813), (Start: 8 @37846 has 23 MA's), (10, 37888), (11, 37897), (14, 37936), (20, 37978), (23, 38038), (26, 38122), (28, 38224), (34, 38338), (35, 38359), (39, 38389), (48, 38506), (54, 38566), (59, 38626), (60, 38674),

Gene: Zany_48 Start: 36845, Stop: 37696, Start Num: 8

Candidate Starts for Zany_48:

(4, 36800), (5, 36812), (Start: 8 @36845 has 23 MA's), (10, 36887), (11, 36896), (23, 37028), (26, 37112), (28, 37214), (34, 37328), (35, 37349), (39, 37379), (48, 37496), (54, 37556), (59, 37616), (60, 37664),