Pham 283889

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 283889 Report

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

Pham number 283889 has 52 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Dalilpop_82
• Track 2 : Turuncu_82
• Track 3 : GTE5_66
• Track 4 : Flapper_83
• Track 5 : GRU1_67
• Track 6 : Emianna_78, Kurt_78
• Track 7 : Bonum_81
• Track 8 : NatB6_77, KidneyBean_77, Wheezy_77, NovumRegina_77, GrootJr_79, Jifall16_76, Tracker_77, Arti_76, Phomeo_76, Foxboro_77
• Track 9 : Outis_78, StarStruck_78, MerCougar_80
• Track 10 : Commandaria_78
• Track 11 : Buggaboo_79, SuperSulley_79
• Track 12 : GTE8_67
• Track 13 : NosilaM_78
• Track 14 : Kabluna_80
• Track 15 : RedRaider_85
• Track 16 : Float294_80
• Track 17 : Lollipop1437_81
• Track 18 : Ennea_85
• Track 19 : Skysand_83
• Track 20 : Patio_80
• Track 21 : NadineRae_76
• Track 22 : HubbaBubba_71
• Track 23 : BiPauneto_79
• Track 24 : Sukkupi_76, Yndexa_76
• Track 25 : WhoseManz_76, Marietta_77
• Track 26 : IDyn_72
• Track 27 : Pemberton_78
• Track 28 : HomeFry_85
• Track 29 : Pleakley_86, Fury_86
• Track 30 : Scuba_87
• Track 31 : Maselop_81, Apiary_81
• Track 32 : GuyFagieri_79
• Track 33 : CoffeeBean_81
• Track 34 : MacGully_90
• Track 35 : ChewyVIII_85

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

The start number called the most often in the published annotations is 17, it was called in 42 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Apiary_81, Arti_76, BiPauneto_79, Bonum_81, Buggaboo_79, CoffeeBean_81, Commandaria_78, Dalilpop_82, Emianna_78, Ennea_85, Flapper_83, Float294_80, Foxboro_77, GRU1_67, GTE5_66, GTE8_67, GrootJr_79, GuyFagieri_79, HubbaBubba_71, IDyn_72, Jifall16_76, Kabluna_80, KidneyBean_77, Kurt_78, Lollipop1437_81, MacGully_90, Marietta_77, Maselop_81, MerCougar_80, NadineRae_76, NatB6_77, NosilaM_78, NovumRegina_77, Outis_78, Patio_80, Pemberton_78, Phomeo_76, RedRaider_85, Skysand_83, StarStruck_78, Sukkupi_76, SuperSulley_79, Tracker_77, Wheezy_77, WhoseManz_76, Yndexa_76,

Genes that have the "Most Annotated" start but do not call it:
• Turuncu_82,

Genes that do not have the "Most Annotated" start:
• ChewyVIII_85, Fury_86, HomeFry_85, Pleakley_86, Scuba_87,

Summary by start number:

Start 6:
• Found in 1 of 52 (1.9%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ChewyVIII_85 (singleton),

Start 16:
• Found in 4 of 52 (7.7%) of genes in pham
• Manual Annotations of this start: 2 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fury_86 (CR5), HomeFry_85 (CR5), Pleakley_86 (CR5), Scuba_87 (CR5),

Start 17:
• Found in 47 of 52 (90.4%) of genes in pham
• Manual Annotations of this start: 42 of 46
• Called 97.9% of time when present
• Phage (with cluster) where this start called: Apiary_81 (CR6), Arti_76 (CR2), BiPauneto_79 (CR4), Bonum_81 (CR2), Buggaboo_79 (CR2), CoffeeBean_81 (CR6), Commandaria_78 (CR2), Dalilpop_82 (CR1), Emianna_78 (CR2), Ennea_85 (CR3), Flapper_83 (CR1), Float294_80 (CR3), Foxboro_77 (CR2), GRU1_67 (CR1), GTE5_66 (CR1), GTE8_67 (CR2), GrootJr_79 (CR2), GuyFagieri_79 (CR6), HubbaBubba_71 (CR4), IDyn_72 (CR4), Jifall16_76 (CR2), Kabluna_80 (CR2), KidneyBean_77 (CR2), Kurt_78 (CR2), Lollipop1437_81 (CR3), MacGully_90 (CR7), Marietta_77 (CR4), Maselop_81 (CR6), MerCougar_80 (CR2), NadineRae_76 (CR4), NatB6_77 (CR2), NosilaM_78 (CR2), NovumRegina_77 (CR2), Outis_78 (CR2), Patio_80 (CR3), Pemberton_78 (CR4), Phomeo_76 (CR2), RedRaider_85 (CR3),

Skysand_83 (CR3), StarStruck_78 (CR2), Sukkupi_76 (CR4), SuperSulley_79 (CR2), Tracker_77 (CR2), Wheezy_77 (CR2), WhoseManz_76 (CR4), Yndexa_76 (CR4),

Start 19:
• Found in 6 of 52 (11.5%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Turuncu_82 (CR1),

Summary by clusters:

There are 8 clusters represented in this pham: CR2, CR3, singleton, CR1, CR6, CR7, CR4, CR5,

Info for manual annotations of cluster CR1:
•Start number 17 was manually annotated 2 times for cluster CR1.
•Start number 19 was manually annotated 1 time for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 17 was manually annotated 21 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 17 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 17 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 16 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster CR6:
•Start number 17 was manually annotated 4 times for cluster CR6.

Info for manual annotations of cluster CR7:
•Start number 17 was manually annotated 1 time for cluster CR7.

Gene Information:

Gene: Apiary_81 Start: 58059, Stop: 57142, Start Num: 17
Candidate Starts for Apiary_81:
(9, 58134), (13, 58119), (Start: 17 @58059 has 42 MA's), (18, 58047), (22, 58011), (23, 58008), (29, 57936), (34, 57897), (36, 57879), (41, 57837), (45, 57822), (51, 57777), (65, 57723), (68, 57699), (73, 57657), (75, 57636), (92, 57591), (93, 57579), (108, 57447), (110, 57429), (126, 57246), (127, 57219), (130, 57150),

Gene: Arti_76 Start: 57808, Stop: 56843, Start Num: 17
Candidate Starts for Arti_76:
(Start: 17 @57808 has 42 MA's), (45, 57559), (47, 57535), (63, 57451), (65, 57430), (71, 57388), (91, 57322), (95, 57298), (96, 57283), (97, 57280), (108, 57157),

Gene: BiPauneto_79 Start: 57149, Stop: 56199, Start Num: 17

Candidate Starts for BiPauneto_79:
(Start: 17 @57149 has 42 MA's), (22, 57104), (45, 56897), (47, 56873), (65, 56786), (71, 56732), (94, 56642), (99, 56597), (118, 56396), (122, 56378), (123, 56354),

Gene: Bonum_81 Start: 59206, Stop: 58238, Start Num: 17
Candidate Starts for Bonum_81:
(Start: 17 @59206 has 42 MA's), (45, 58954), (65, 58843), (71, 58801), (108, 58552), (123, 58393),

Gene: Buggaboo_79 Start: 59745, Stop: 58804, Start Num: 17
Candidate Starts for Buggaboo_79:
(Start: 17 @59745 has 42 MA's), (45, 59493), (47, 59469), (59, 59406), (65, 59385), (71, 59355), (97, 59241), (108, 59118), (116, 59031), (123, 58959),

Gene: ChewyVIII_85 Start: 63301, Stop: 62099, Start Num: 6
Candidate Starts for ChewyVIII_85:
(Start: 6 @63301 has 1 MA's), (7, 63286), (11, 63256), (20, 63166), (24, 63136), (26, 63118), (28, 63079), (30, 63064), (32, 63046), (34, 63016), (37, 62980), (38, 62965), (42, 62941), (45, 62929), (50, 62887), (56, 62836), (75, 62686), (80, 62665), (90, 62608), (99, 62530), (102, 62482), (103, 62461), (120, 62302), (125, 62242), (129, 62128),

Gene: CoffeeBean_81 Start: 58026, Stop: 57085, Start Num: 17
Candidate Starts for CoffeeBean_81:
(4, 58488), (5, 58356), (10, 58095), (Start: 17 @58026 has 42 MA's), (18, 58014), (22, 57978), (23, 57975), (29, 57903), (34, 57864), (36, 57846), (41, 57804), (45, 57789), (51, 57744), (65, 57690), (68, 57666), (73, 57624), (75, 57603), (77, 57591), (83, 57570), (92, 57534), (108, 57390), (110, 57372), (126, 57189), (127, 57162), (130, 57093),

Gene: Commandaria_78 Start: 59237, Stop: 58263, Start Num: 17
Candidate Starts for Commandaria_78:
(15, 59273), (Start: 17 @59237 has 42 MA's), (44, 58994), (45, 58988), (47, 58964), (57, 58904), (65, 58871), (71, 58829), (95, 58718), (96, 58703), (97, 58700), (108, 58577),

Gene: Dalilpop_82 Start: 60143, Stop: 59121, Start Num: 17
Candidate Starts for Dalilpop_82:
(Start: 17 @60143 has 42 MA's), (Start: 19 @60131 has 1 MA's), (27, 60050), (31, 60017), (45, 59894), (47, 59870), (52, 59840), (61, 59783), (64, 59774), (65, 59759), (74, 59693), (79, 59660), (87, 59630), (97, 59558), (99, 59534), (100, 59519), (112, 59393), (116, 59348),

Gene: Emianna_78 Start: 59489, Stop: 58524, Start Num: 17
Candidate Starts for Emianna_78:
(Start: 17 @59489 has 42 MA's), (45, 59240), (47, 59216), (63, 59132), (65, 59111), (71, 59069), (91, 59003), (95, 58979), (96, 58964), (97, 58961), (108, 58838),

Gene: Ennea_85 Start: 60532, Stop: 59570, Start Num: 17
Candidate Starts for Ennea_85:
(Start: 17 @60532 has 42 MA's), (33, 60373), (44, 60292), (45, 60286), (63, 60178), (65, 60157), (71, 60115), (82, 60049), (95, 60025), (96, 60010), (97, 60007), (101, 59959), (108, 59884), (112, 59842),

Gene: Flapper_83 Start: 60202, Stop: 59177, Start Num: 17
Candidate Starts for Flapper_83:
(Start: 17 @60202 has 42 MA's), (Start: 19 @60190 has 1 MA's), (31, 60076), (43, 59965), (47, 59932), (48, 59923), (52, 59902), (53, 59899), (61, 59845), (64, 59836), (65, 59821), (71, 59779), (76, 59725), (88, 59674), (97, 59614), (99, 59590), (100, 59575), (112, 59449), (116, 59404),

Gene: Float294_80 Start: 60434, Stop: 59475, Start Num: 17
Candidate Starts for Float294_80:
(Start: 17 @60434 has 42 MA's), (33, 60275), (44, 60194), (45, 60188), (63, 60080), (65, 60059), (71, 60017), (82, 59954), (95, 59930), (96, 59915), (97, 59912), (108, 59789), (121, 59663),

Gene: Foxboro_77 Start: 59231, Stop: 58266, Start Num: 17
Candidate Starts for Foxboro_77:
(Start: 17 @59231 has 42 MA's), (45, 58982), (47, 58958), (63, 58874), (65, 58853), (71, 58811), (91, 58745), (95, 58721), (96, 58706), (97, 58703), (108, 58580),

Gene: Fury_86 Start: 57934, Stop: 56957, Start Num: 16
Candidate Starts for Fury_86:
(12, 57982), (Start: 16 @57934 has 2 MA's), (22, 57883), (39, 57703), (45, 57679), (47, 57655), (48, 57646), (49, 57643), (65, 57562), (78, 57433), (84, 57412), (97, 57391), (104, 57301), (108, 57271), (112, 57229), (113, 57220), (116, 57184), (119, 57151), (121, 57145), (123, 57112), (128, 56989),

Gene: GRU1_67 Start: 51605, Stop: 50610, Start Num: 17
Candidate Starts for GRU1_67:
(Start: 17 @51605 has 42 MA's), (Start: 19 @51593 has 1 MA's), (27, 51512), (31, 51479), (45, 51359), (47, 51335), (48, 51326), (52, 51305), (61, 51248), (64, 51239), (65, 51224), (74, 51182), (79, 51149), (87, 51119), (97, 51047), (99, 51023), (100, 51008), (112, 50882), (116, 50837),

Gene: GTE5_66 Start: 52365, Stop: 51349, Start Num: 17
Candidate Starts for GTE5_66:
(Start: 17 @52365 has 42 MA's), (Start: 19 @52353 has 1 MA's), (31, 52239), (43, 52128), (45, 52119), (47, 52095), (48, 52086), (52, 52065), (53, 52062), (65, 51987), (74, 51921), (79, 51888), (87, 51858), (97, 51786), (99, 51762), (100, 51747), (108, 51663), (112, 51621), (116, 51576), (122, 51528),

Gene: GTE8_67 Start: 52721, Stop: 51696, Start Num: 17
Candidate Starts for GTE8_67:
(Start: 17 @52721 has 42 MA's), (Start: 19 @52712 has 1 MA's), (45, 52475), (47, 52451), (65, 52346), (71, 52304), (86, 52208), (88, 52196), (91, 52178), (96, 52136), (108, 52010),

Gene: GrootJr_79 Start: 58405, Stop: 57440, Start Num: 17
Candidate Starts for GrootJr_79:
(Start: 17 @58405 has 42 MA's), (45, 58156), (47, 58132), (63, 58048), (65, 58027), (71, 57985), (91, 57919), (95, 57895), (96, 57880), (97, 57877), (108, 57754),

Gene: GuyFagieri_79 Start: 57841, Stop: 56942, Start Num: 17
Candidate Starts for GuyFagieri_79:
(1, 58549), (2, 58483), (3, 58432), (5, 58213), (8, 57910), (10, 57901), (12, 57892), (14, 57889), (Start: 17 @57841 has 42 MA's), (18, 57829), (22, 57793), (25, 57766), (34, 57679), (35, 57673), (54, 57547), (65, 57505), (68, 57493), (73, 57448), (92, 57385), (108, 57247), (110, 57229), (115, 57166), (118, 57148), (126, 57046), (127, 57019), (128, 56974),

Gene: HomeFry_85 Start: 57022, Stop: 56012, Start Num: 16
Candidate Starts for HomeFry_85:
(12, 57070), (Start: 16 @57022 has 2 MA's), (22, 56971), (39, 56791), (45, 56767), (47, 56743), (48, 56734), (49, 56731), (65, 56650), (78, 56521), (89, 56497), (97, 56446), (100, 56407), (104, 56356), (116, 56239), (123, 56167), (128, 56044),

Gene: HubbaBubba_71 Start: 53779, Stop: 52829, Start Num: 17

Candidate Starts for HubbaBubba_71:
(Start: 17 @53779 has 42 MA's), (22, 53734), (40, 53545), (45, 53527), (47, 53503), (65, 53416), (71, 53362), (94, 53272), (99, 53227), (122, 53008), (123, 52984),

Gene: IDyn_72 Start: 54160, Stop: 53222, Start Num: 17
Candidate Starts for IDyn_72:
(Start: 17 @54160 has 42 MA's), (22, 54115), (45, 53908), (47, 53884), (65, 53797), (71, 53743), (72, 53731), (75, 53701), (99, 53620), (122, 53401),

Gene: Jifall16_76 Start: 58724, Stop: 57759, Start Num: 17
Candidate Starts for Jifall16_76:
(Start: 17 @58724 has 42 MA's), (45, 58475), (47, 58451), (63, 58367), (65, 58346), (71, 58304), (91, 58238), (95, 58214), (96, 58199), (97, 58196), (108, 58073),

Gene: Kabluna_80 Start: 58556, Stop: 57576, Start Num: 17
Candidate Starts for Kabluna_80:
(Start: 17 @58556 has 42 MA's), (45, 58304), (47, 58280), (65, 58193), (71, 58151), (108, 57890), (116, 57803), (123, 57731),

Gene: KidneyBean_77 Start: 58848, Stop: 57883, Start Num: 17
Candidate Starts for KidneyBean_77:
(Start: 17 @58848 has 42 MA's), (45, 58599), (47, 58575), (63, 58491), (65, 58470), (71, 58428), (91, 58362), (95, 58338), (96, 58323), (97, 58320), (108, 58197),

Gene: Kurt_78 Start: 59504, Stop: 58539, Start Num: 17
Candidate Starts for Kurt_78:
(Start: 17 @59504 has 42 MA's), (45, 59255), (47, 59231), (63, 59147), (65, 59126), (71, 59084), (91, 59018), (95, 58994), (96, 58979), (97, 58976), (108, 58853),

Gene: Lollipop1437_81 Start: 60229, Stop: 59249, Start Num: 17
Candidate Starts for Lollipop1437_81:
(Start: 17 @60229 has 42 MA's), (44, 59989), (45, 59983), (47, 59959), (63, 59875), (65, 59854), (67, 59824), (71, 59794), (82, 59728), (95, 59704), (96, 59689), (97, 59686), (101, 59638), (108, 59563), (112, 59521),

Gene: MacGully_90 Start: 61263, Stop: 60304, Start Num: 17
Candidate Starts for MacGully_90:
(14, 61311), (Start: 17 @61263 has 42 MA's), (22, 61218), (23, 61215), (41, 61050), (46, 61023), (51, 60984), (53, 60978), (55, 60954), (58, 60942), (62, 60930), (68, 60888), (69, 60876), (75, 60825), (85, 60783), (92, 60747), (105, 60624), (106, 60621), (107, 60618), (109, 60588), (111, 60567), (115, 60516), (129, 60330),

Gene: Marietta_77 Start: 55041, Stop: 54091, Start Num: 17
Candidate Starts for Marietta_77:
(Start: 17 @55041 has 42 MA's), (22, 54996), (45, 54789), (47, 54765), (65, 54678), (71, 54624), (94, 54534), (99, 54489), (108, 54390), (122, 54270),

Gene: Maselop_81 Start: 58078, Stop: 57161, Start Num: 17
Candidate Starts for Maselop_81:
(9, 58153), (13, 58138), (Start: 17 @58078 has 42 MA's), (18, 58066), (22, 58030), (23, 58027), (29, 57955), (34, 57916), (36, 57898), (41, 57856), (45, 57841), (51, 57796), (65, 57742), (68, 57718), (73, 57676), (75, 57655), (92, 57610), (93, 57598), (108, 57466), (110, 57448), (126, 57265), (127, 57238), (130, 57169),

Gene: MerCougar_80 Start: 60190, Stop: 59258, Start Num: 17
Candidate Starts for MerCougar_80:
(Start: 17 @60190 has 42 MA's), (21, 60151), (45, 59938), (47, 59914), (48, 59905), (59, 59851), (65, 59830), (71, 59788), (97, 59695), (108, 59572), (123, 59413), (124, 59395),

Gene: NadineRae_76 Start: 54655, Stop: 53702, Start Num: 17
Candidate Starts for NadineRae_76:
(Start: 17 @54655 has 42 MA's), (20, 54628), (22, 54610), (40, 54421), (45, 54403), (47, 54379), (65, 54289), (70, 54247), (71, 54235), (94, 54145), (99, 54100), (117, 53908), (118, 53899), (122, 53881), (123, 53857),

Gene: NatB6_77 Start: 58124, Stop: 57159, Start Num: 17
Candidate Starts for NatB6_77:
(Start: 17 @58124 has 42 MA's), (45, 57875), (47, 57851), (63, 57767), (65, 57746), (71, 57704), (91, 57638), (95, 57614), (96, 57599), (97, 57596), (108, 57473),

Gene: NosilaM_78 Start: 58816, Stop: 57878, Start Num: 17
Candidate Starts for NosilaM_78:
(Start: 17 @58816 has 42 MA's), (45, 58564), (47, 58540), (59, 58474), (65, 58453), (71, 58411), (81, 58345), (108, 58192), (123, 58033),

Gene: NovumRegina_77 Start: 58404, Stop: 57439, Start Num: 17
Candidate Starts for NovumRegina_77:
(Start: 17 @58404 has 42 MA's), (45, 58155), (47, 58131), (63, 58047), (65, 58026), (71, 57984), (91, 57918), (95, 57894), (96, 57879), (97, 57876), (108, 57753),

Gene: Outis_78 Start: 59294, Stop: 58350, Start Num: 17
Candidate Starts for Outis_78:
(Start: 17 @59294 has 42 MA's), (21, 59255), (45, 59042), (47, 59018), (48, 59009), (59, 58955), (65, 58934), (71, 58892), (97, 58787), (108, 58664), (123, 58505), (124, 58487),

Gene: Patio_80 Start: 59422, Stop: 58460, Start Num: 17
Candidate Starts for Patio_80:
(Start: 17 @59422 has 42 MA's), (44, 59182), (45, 59176), (47, 59152), (65, 59047), (71, 59005), (82, 58939), (95, 58915), (96, 58900), (97, 58897), (108, 58774),

Gene: Pemberton_78 Start: 55218, Stop: 54268, Start Num: 17
Candidate Starts for Pemberton_78:
(Start: 17 @55218 has 42 MA's), (22, 55173), (45, 54966), (47, 54942), (65, 54855), (71, 54801), (94, 54711), (99, 54666), (122, 54447),

Gene: Phomeo_76 Start: 58720, Stop: 57755, Start Num: 17
Candidate Starts for Phomeo_76:
(Start: 17 @58720 has 42 MA's), (45, 58471), (47, 58447), (63, 58363), (65, 58342), (71, 58300), (91, 58234), (95, 58210), (96, 58195), (97, 58192), (108, 58069),

Gene: Pleakley_86 Start: 57935, Stop: 56958, Start Num: 16
Candidate Starts for Pleakley_86:
(12, 57983), (Start: 16 @57935 has 2 MA's), (22, 57884), (39, 57704), (45, 57680), (47, 57656), (48, 57647), (49, 57644), (65, 57563), (78, 57434), (84, 57413), (97, 57392), (104, 57302), (108, 57272), (112, 57230), (113, 57221), (116, 57185), (119, 57152), (121, 57146), (123, 57113), (128, 56990),

Gene: RedRaider_85 Start: 61635, Stop: 60610, Start Num: 17
Candidate Starts for RedRaider_85:
(Start: 17 @61635 has 42 MA's), (33, 61476), (44, 61395), (45, 61389), (63, 61281), (65, 61260), (71, 61218), (95, 61065), (96, 61050), (97, 61047), (114, 60852), (118, 60807), (123, 60765),

Gene: Scuba_87 Start: 58046, Stop: 57030, Start Num: 16
Candidate Starts for Scuba_87:
(12, 58094), (Start: 16 @58046 has 2 MA's), (22, 57995), (39, 57815), (45, 57791), (47, 57767), (48, 57758), (49, 57755), (65, 57674), (78, 57545), (97, 57464), (104, 57374), (108, 57344), (112, 57302), (113, 57293), (119, 57224), (121, 57218), (123, 57185), (128, 57062),

Gene: Skysand_83 Start: 60348, Stop: 59341, Start Num: 17
Candidate Starts for Skysand_83:
(Start: 17 @60348 has 42 MA's), (33, 60189), (44, 60108), (45, 60102), (47, 60078), (63, 59994), (65, 59973), (71, 59931), (95, 59796), (96, 59781), (97, 59778), (108, 59655), (121, 59529),

Gene: StarStruck_78 Start: 59294, Stop: 58350, Start Num: 17
Candidate Starts for StarStruck_78:
(Start: 17 @59294 has 42 MA's), (21, 59255), (45, 59042), (47, 59018), (48, 59009), (59, 58955), (65, 58934), (71, 58892), (97, 58787), (108, 58664), (123, 58505), (124, 58487),

Gene: Sukkupi_76 Start: 56690, Stop: 55740, Start Num: 17
Candidate Starts for Sukkupi_76:
(Start: 17 @56690 has 42 MA's), (22, 56645), (45, 56438), (47, 56414), (65, 56327), (71, 56273), (94, 56183), (98, 56141), (99, 56138), (122, 55919),

Gene: SuperSulley_79 Start: 59745, Stop: 58804, Start Num: 17
Candidate Starts for SuperSulley_79:
(Start: 17 @59745 has 42 MA's), (45, 59493), (47, 59469), (59, 59406), (65, 59385), (71, 59355), (97, 59241), (108, 59118), (116, 59031), (123, 58959),

Gene: Tracker_77 Start: 57860, Stop: 56895, Start Num: 17
Candidate Starts for Tracker_77:
(Start: 17 @57860 has 42 MA's), (45, 57611), (47, 57587), (63, 57503), (65, 57482), (71, 57440), (91, 57374), (95, 57350), (96, 57335), (97, 57332), (108, 57209),

Gene: Turuncu_82 Start: 59576, Stop: 58596, Start Num: 19
Candidate Starts for Turuncu_82:
(Start: 17 @59588 has 42 MA's), (Start: 19 @59576 has 1 MA's), (31, 59462), (43, 59351), (45, 59342), (47, 59318), (48, 59309), (52, 59288), (53, 59285), (60, 59240), (66, 59210), (74, 59168), (79, 59135), (87, 59105), (97, 59033), (99, 59009), (100, 58994), (116, 58823),

Gene: Wheezy_77 Start: 58079, Stop: 57114, Start Num: 17
Candidate Starts for Wheezy_77:
(Start: 17 @58079 has 42 MA's), (45, 57830), (47, 57806), (63, 57722), (65, 57701), (71, 57659), (91, 57593), (95, 57569), (96, 57554), (97, 57551), (108, 57428),

Gene: WhoseManz_76 Start: 54708, Stop: 53758, Start Num: 17
Candidate Starts for WhoseManz_76:
(Start: 17 @54708 has 42 MA's), (22, 54663), (45, 54456), (47, 54432), (65, 54345), (71, 54291), (94, 54201), (99, 54156), (108, 54057), (122, 53937),

Gene: Yndexa_76 Start: 56690, Stop: 55740, Start Num: 17

Candidate Starts for Yndexa_76:
(Start: 17 @56690 has 42 MA's), (22, 56645), (45, 56438), (47, 56414), (65, 56327), (71, 56273), (94, 56183), (98, 56141), (99, 56138), (122, 55919),