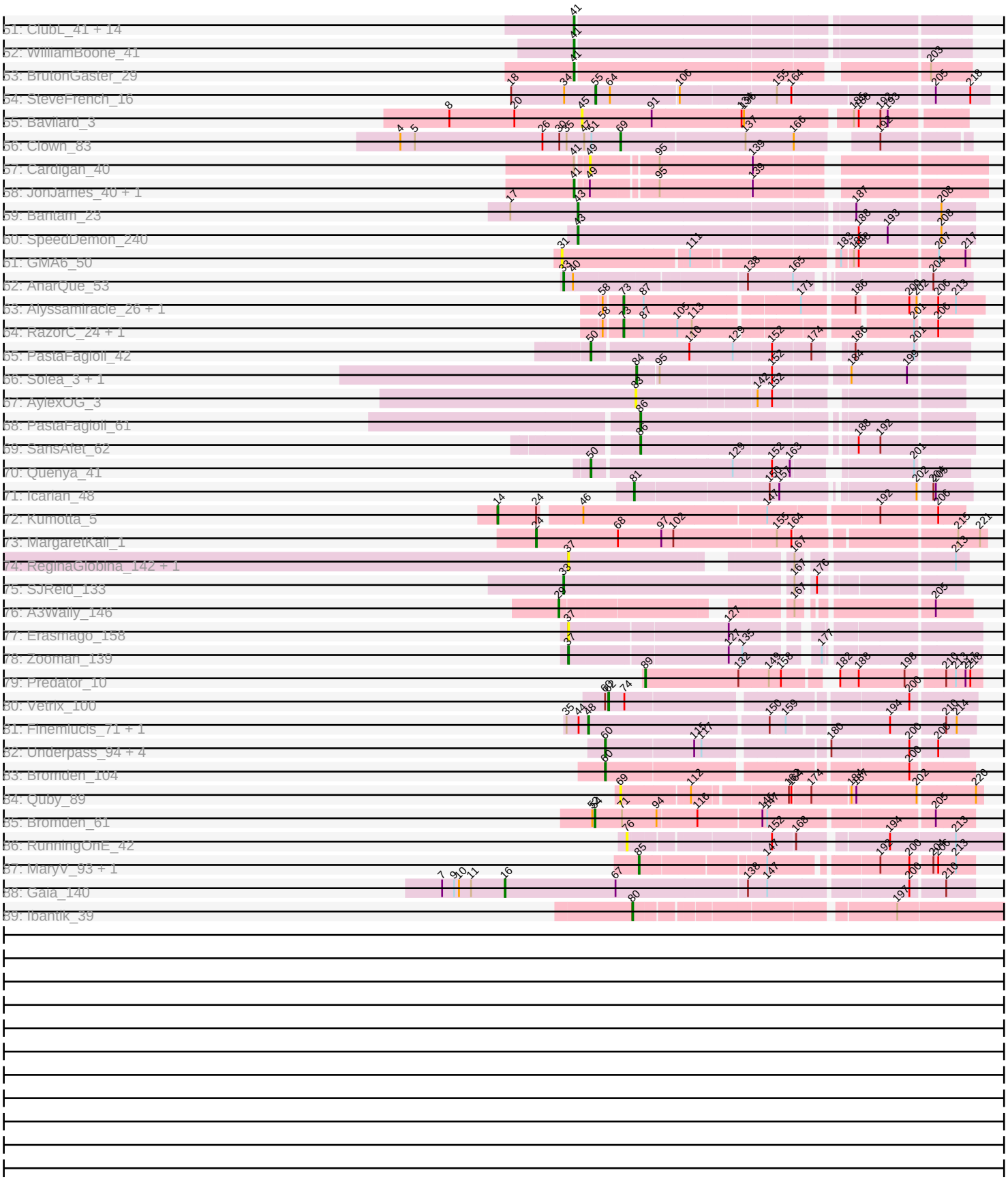
Pham 283594


1: Kovu_26
2: Kayllssa_41
3: Tuck_30
4: Yang_45
5: Community_49 + 1
6: AGrandiflora_41
7: Schafner_27
8: Crewmate_2
9: Adolin_42
10: Shawty_32
11: EGole_223
12: Daubenski_27
13: WhereRU_178 + 2
14: Anedea_217
15: PumpkinSpice_263 + 1
16: StarPlatinum_46
17: Spelly_265 + 5
18: TomSawyer_265
19: AcciDwight_269 + 2
20: Manuel_3
21: RosePhanie_70
22: LazerLemon_75
23: TunaTartare_189 + 1
24: Forrest_254 + 1
25: DeluluLabubu_257
26: Limpid_229 + 1
27: DeluluLabubu_105
28: Kenrey_232
29: TunaTartare_254
30: Forrest_150
31: Westy_204
32: Karp_197
33: Rowa_60
34: Alone3_216 + 2
35: LuckySocke_64 + 2
36: Talos_188 + 1
37: Talos_64
38: Park1214_79
39: Alone3_117
40: Spooks_32
41: Bimmel_31
42: Success_33
43: Phabba_53
44: NiceHouse_61
45: SFuller_27
46: bflix2_25
47: Madraxi_29
48: SFuller_99
49: Nova53_72
50: Nova53_188

Pham 283594


51: ClubL_41 + 14
52: WilliamBoone_41
53: BrutonGaster_29
54: SteveFrench_16
55: Bavilard_3
56: Clown_83
57: Cardigan_40
58: JonJames_40 + 1
59: Bantam_23
60: SpeedDemon_240
61: GMA6_50
62: AnarQue_53
63: Alyssamiracle_26 + 1
64: RazorC_24 + 1
65: PastaFagioli_42
66: Solea_3 + 1
67: AylexOG_3
68: PastaFagioli_61
69: SansAlet_62
70: Quenya_41
71: Icarian_48
72: Kumotta_5
73: MargaretKail_1
74: ReginaGlobina_142 + 1
75: SJReid_133
76: A3Wally_146
77: Erasmago_158
78: Zooman_139
79: Predator_10
80: Vetrix_100
81: Finemlucis_71 + 1
82: Onderpass_94 + 4
83: Bromden_104
84: Quby_89
85: Bromden_61
86: RunningOnE_42
87: MaryV_93 + 1
88: Gaia_140
89: Ibantik_39

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 283594 Report

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

Pham number 283594 has 133 members, 22 are drafts.

Phages represented in each track:
- Track 1 : Kovu_26
- Track 2 : Kaylissa_41
- Track 3 : Tuck_30
- Track 4 : Yang_45
- Track 5 : Community_49, Nitro_45
- Track 6 : AGrandiflora_41
- Track 7 : Schaffner_27
- Track 8 : Crewmate_2
- Track 9 : Adolin_42
- Track 10 : Shawty_32
- Track 11 : EGole_223
- Track 12 : Daubenski_27
- Track 13 : WhereRU_178, Davielle_179, Persimmon_179
- Track 14 : Anedea_217
- Track 15 : PumpkinSpice_263, Wipeout_252
- Track 16 : StarPlatinum_46
- Track 17 : Spelly_265, Starbow_257, JimJam_268, CeilingFan_266, KentuckyRacer_267, Spilled_268
- Track 18 : TomSawyer_265
- Track 19 : AcciDwight_269, Gibbi_270, Rikishi_261
- Track 20 : Manuel_3
- Track 21 : RosePharie_70
- Track 22 : LazerLemon_75
- Track 23 : TunaTartare_189, Sham_181
- Track 24 : Forrest_254, Jada_255
- Track 25 : DeluluLabubu_257
- Track 26 : Limpid_229, Annadreamy_222
- Track 27 : DeluluLabubu_105
- Track 28 : Kenrey_232
- Track 29 : TunaTartare_254
- Track 30 : Forrest_150
- Track 31 : Westy_204
- Track 32 : Karp_197
- Track 33 : Rowa_60
- Track 34 : Alone3_216, Park1214_226, Talos_215
- Track 35 : LuckySocke_64, Fudan_66, Alone3_65
- Track 36 : Talos_188, Alone3_188

• Track 37 : Talos_64
• Track 38 : Park1214_79
• Track 39 : Alone3_117
• Track 40 : Spooks_32
• Track 41 : Bimmel_31
• Track 42 : Success_33
• Track 43 : Phabba_53
• Track 44 : NiceHouse_61
• Track 45 : SFuller_27
• Track 46 : Jflix2_25
• Track 47 : Madraxi_29
• Track 48 : SFuller_99
• Track 49 : Nova53_72
• Track 50 : Nova53_188
• Track 51 : ClubL_41, Geeche_40, PhinkBoden_41, Dusty_40, Miskis_39, Lozinak_41, Engineer_42, Abscondus_40, Toniann_41, Norvs_42, Cucurbita_43, Smoothie_42, Aphelion_41, Culver_41, Bachita_43
• Track 52 : WilliamBoone_41
• Track 53 : BrutonGaster_29
• Track 54 : SteveFrench_16
• Track 55 : Bavilard_3
• Track 56 : Clown_83
• Track 57 : Cardigan_40
• Track 58 : JonJames_40, Yvonnetastic_38
• Track 59 : Bantam_23
• Track 60 : SpeedDemon_240
• Track 61 : GMA6_50
• Track 62 : AnarQue_53
• Track 63 : Alyssamiracle_26, Genamy16_26
• Track 64 : RazorC_24, Zany_25
• Track 65 : PastaFagioli_42
• Track 66 : Solea_3, Milomuff_3
• Track 67 : AylexOG_3
• Track 68 : PastaFagioli_61
• Track 69 : SansAfet_62
• Track 70 : Quenya_41
• Track 71 : Icarian_48
• Track 72 : Kumotta_5
• Track 73 : MargaretKali_1
• Track 74 : ReginaGlobina_142, LeoJr_143
• Track 75 : SJReid_133
• Track 76 : A3Wally_146
• Track 77 : Erasmago_158
• Track 78 : Zooman_139
• Track 79 : Predator_10
• Track 80 : Vetrix_100
• Track 81 : Finemlucis_71, Gabriela_68
• Track 82 : Underpass_94, Nicholasp3_102, Rumpelstiltskin_98, Gardann_101, Kahlid_101
• Track 83 : Bromden_104
• Track 84 : Quby_89
• Track 85 : Bromden_61
• Track 86 : RunningOnE_42

• Track 87 : MaryV_93, Wildcat_93
• Track 88 : Gaia_140
• Track 89 : Ibantik_39

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

The start number called the most often in the published annotations is 41, it was called in 18 of the 111 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abscondus_40, Aphelion_41, Bachita_43, BrutonGaster_29, ClubL_41, Cucurbita_43, Culver_41, Dusty_40, Engineer_42, Geeche_40, JonJames_40, Lozinak_41, Miskis_39, Norvs_42, PhinkBoden_41, Smoothie_42, Toniann_41, WilliamBoone_41, Yvonnetastic_38,

Genes that have the "Most Annotated" start but do not call it:
• Cardigan_40,

Genes that do not have the "Most Annotated" start:
• A3Wally_146, AGrandiflora_41, AcciDwight_269, Adolin_42, Alone3_117, Alone3_188, Alone3_216, Alone3_65, Alyssamiracle_26, AnarQue_53, Anedea_217, Annadreamy_222, AylexOG_3, Bantam_23, Bavilard_3, Bimmel_31, Bromden_104, Bromden_61, CeilingFan_266, Clown_83, Community_49, Crewmate_2, Daubenski_27, Davielle_179, DeluluLabubu_105, DeluluLabubu_257, EGole_223, Erasmago_158, Finemlucis_71, Forrest_150, Forrest_254, Fudan_66, GMA6_50, Gabriela_68, Gaia_140, Gardann_101, Genamy16_26, Gibbi_270, Ibantik_39, Icarian_48, Jada_255, Jflix2_25, JimJam_268, Kahlid_101, Karp_197, Kaylissa_41, Kenrey_232, KentuckyRacer_267, Kovu_26, Kumotta_5, LazerLemon_75, LeoJr_143, Limpid_229, LuckySocke_64, Madraxi_29, Manuel_3, MargaretKali_1, MaryV_93, Milomuff_3, NiceHouse_61, Nicholasp3_102, Nitro_45, Nova53_188, Nova53_72, Park1214_226, Park1214_79, PastaFagioli_42, PastaFagioli_61, Persimmon_179, Phabba_53, Predator_10, PumpkinSpice_263, Quby_89, Quenya_41, RazorC_24, ReginaGlobina_142, Rikishi_261, RosePharie_70, Rowa_60, Rumpelstiltskin_98, RunningOnE_42, SFuller_27, SFuller_99, SJReid_133, SansAfet_62, Schaffner_27, Sham_181, Shawty_32, Solea_3, SpeedDemon_240, Spelly_265, Spilled_268, Spooks_32, StarPlatinum_46, Starbow_257, SteveFrench_16, Success_33, Talos_188, Talos_215, Talos_64, TomSawyer_265, Tuck_30, TunaTartare_189, TunaTartare_254, Underpass_94, Vetrix_100, Westy_204, WhereRU_178, Wildcat_93, Wipeout_252, Yang_45, Zany_25, Zooman_139,

Summary by start number:

Start 13:
• Found in 12 of 133 (9.0%) of genes in pham
• Manual Annotations of this start: 10 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AcciDwight_269 (BE2), CeilingFan_266 (BE2), Gibbi_270 (BE2), JimJam_268 (BE2), KentuckyRacer_267 (BE2), PumpkinSpice_263 (BE2), Rikishi_261 (BE2), Spelly_265 (BE2), Spilled_268 (BE2),

Starbow_257 (BE2), TomSawyer_265 (BE2), Wipeout_252 (BE2),

Start 14:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kumotta_5 (FB),

Start 16:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gaia_140 (X),

Start 19:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yang_45 (AZ1),

Start 22:
• Found in 1 of 133 (0.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DeluluLabubu_105 (BK1),

Start 24:
• Found in 3 of 133 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 33.3% of time when present
• Phage (with cluster) where this start called: MargaretKali_1 (FB),

Start 26:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 50.0% of time when present
• Phage (with cluster) where this start called: EGole_223 (BE1),

Start 28:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Community_49 (AZ1), Nitro_45 (AZ1),

Start 29:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 2 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A3Wally_146 (GD1), LazerLemon_75 (BH),

Start 31:
• Found in 1 of 133 (0.8%) of genes in pham

• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA6_50 (DQ),

Start 32:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phabba_53 (C2),

Start 33:
• Found in 4 of 133 (3.0%) of genes in pham
• Manual Annotations of this start: 3 of 111
• Called 75.0% of time when present
• Phage (with cluster) where this start called: AnarQue_53 (DR), SJReid_133 (FC), Westy_204 (BK1),

Start 36:
• Found in 1 of 133 (0.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SFuller_99 (CF),

Start 37:
• Found in 14 of 133 (10.5%) of genes in pham
• Manual Annotations of this start: 9 of 111
• Called 85.7% of time when present
• Phage (with cluster) where this start called: Anedea_217 (BE1), Daubenski_27 (BE1), Davielle_179 (BE1), Erasmago_158 (GD2), Forrest_150 (BK1), Karp_197 (BK1), LeoJr_143 (FC), Nova53_188 (CG), Persimmon_179 (BE1), ReginaGlobina_142 (FC), WhereRU_178 (BE1), Zooman_139 (GD2),

Start 38:
• Found in 5 of 133 (3.8%) of genes in pham
• Manual Annotations of this start: 3 of 111
• Called 80.0% of time when present
• Phage (with cluster) where this start called: Alone3_65 (BS), Fudan_66 (BS), LuckySocke_64 (BS), RosePharie_70 (BF),

Start 39:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Talos_64 (BS),

Start 41:
• Found in 20 of 133 (15.0%) of genes in pham
• Manual Annotations of this start: 18 of 111
• Called 95.0% of time when present
• Phage (with cluster) where this start called: Abscondus_40 (CQ1), Aphelion_41 (CQ1), Bachita_43 (CQ1), BrutonGaster_29 (CQ2), ClubL_41 (CQ1), Cucurbita_43 (CQ1), Culver_41 (CQ1), Dusty_40 (CQ1), Engineer_42 (CQ1), Geeche_40 (CQ1), JonJames_40 (DD), Lozinak_41 (CQ1), Miskis_39 (CQ1), Norvs_42 (CQ1),

PhinkBoden_41 (CQ1), Smoothie_42 (CQ1), Toniann_41 (CQ1), WilliamBoone_41 (CQ1), Yvonnetastic_38 (DD),

Start 43:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 2 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bantam_23 (DL), SpeedDemon_240 (DL),

Start 45:
• Found in 3 of 133 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AGrandiflora_41 (AZ1), Bavilard_3 (CT), Kaylissa_41 (AZ1),

Start 48:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 2 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Finemlucis_71 (L2), Gabriela_68 (L2),

Start 49:
• Found in 3 of 133 (2.3%) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Cardigan_40 (DD),

Start 50:
• Found in 3 of 133 (2.3%) of genes in pham
• Manual Annotations of this start: 3 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alone3_117 (BS), PastaFagioli_42 (EB), Quenya_41 (EB),

Start 51:
• Found in 3 of 133 (2.3%) of genes in pham
• Manual Annotations of this start: 2 of 111
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Adolin_42 (AZ1), Crewmate_2 (AZ1),

Start 54:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bromden_61 (L4),

Start 55:
• Found in 4 of 133 (3.0%) of genes in pham
• Manual Annotations of this start: 3 of 111
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Alone3_216 (BS), Park1214_226 (BS), SteveFrench_16 (CS2), Talos_215 (BS),

Start 56:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nova53_72 (CG),

Start 57:
• Found in 4 of 133 (3.0%) of genes in pham
• Manual Annotations of this start: 2 of 111
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Alone3_188 (BS), Talos_188 (BS),

Start 59:
• Found in 12 of 133 (9.0%) of genes in pham
• Manual Annotations of this start: 9 of 111
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Annadreamy_222 (BK1), DeluluLabubu_257 (BK1), Forrest_254 (BK1), Jada_255 (BK1), Kenrey_232 (BK1), Kovu_26 (AL), Limpid_229 (BK1), NiceHouse_61 (CE), StarPlatinum_46 (BE2), TunaTartare_254 (BK1),

Start 60:
• Found in 7 of 133 (5.3%) of genes in pham
• Manual Annotations of this start: 6 of 111
• Called 85.7% of time when present
• Phage (with cluster) where this start called: Bromden_104 (L4), Gardann_101 (L2), Kahlid_101 (L2), Nicholasp3_102 (L2), Rumpelstiltskin_98 (L2), Underpass_94 (L2),

Start 61:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Shawty_32 (BB1),

Start 62:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Vetrix_100 (L2),

Start 63:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Manuel_3 (BF),

Start 65:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 50.0% of time when present

• Phage (with cluster) where this start called: Schaffner_27 (AZ1),

Start 66:
• Found in 4 of 133 (3.0%) of genes in pham
• Manual Annotations of this start: 2 of 111
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Sham_181 (BK1), TunaTartare_189 (BK1),

Start 69:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Clown_83 (DC2), Quby_89 (L4),

Start 70:
• Found in 3 of 133 (2.3%) of genes in pham
• Manual Annotations of this start: 2 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jflix2_25 (CF), Madraxi_29 (CF), SFuller_27 (CF),

Start 73:
• Found in 4 of 133 (3.0%) of genes in pham
• Manual Annotations of this start: 4 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alyssamiracle_26 (DV), Genamy16_26 (DV), RazorC_24 (DV), Zany_25 (DV),

Start 75:
• Found in 2 of 133 (1.5%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Park1214_79 (BS),

Start 76:
• Found in 4 of 133 (3.0%) of genes in pham
• Manual Annotations of this start: 3 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bimmel_31 (BT), RunningOnE_42 (UNK), Spooks_32 (BT), Success_33 (BT),

Start 77:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Tuck_30 (AZ1),

Start 80:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Ibantik_39 (singleton),

Start 81:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Icarian_48 (EB),

Start 83:
• Found in 1 of 133 (0.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AylexOG_3 (EB),

Start 84:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Milomuff_3 (EB), Solea_3 (EB),

Start 85:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 2 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MaryV_93 (V), Wildcat_93 (V),

Start 86:
• Found in 2 of 133 (1.5%) of genes in pham
• Manual Annotations of this start: 2 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PastaFagioli_61 (EB), SansAfet_62 (EB),

Start 89:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Predator_10 (H1),

Start 104:
• Found in 1 of 133 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rowa_60 (BL),

Summary by clusters:

There are 37 clusters represented in this pham: GD1, BF, BL, DD, BH, GD2, BT, FB, FC, BS, DV, DR, DL, DQ, CQ2, CQ1, BB1, CS2, CG, AL, CE, CF, L4, L2, BK1, V, X, singleton, UNK, DC2, C2, EB, CT, H1, BE2, AZ1, BE1,

Info for manual annotations of cluster AL:
•Start number 59 was manually annotated 1 time for cluster AL.

Info for manual annotations of cluster AZ1:
•Start number 19 was manually annotated 1 time for cluster AZ1.
•Start number 28 was manually annotated 1 time for cluster AZ1.
•Start number 45 was manually annotated 1 time for cluster AZ1.
•Start number 51 was manually annotated 2 times for cluster AZ1.
•Start number 65 was manually annotated 1 time for cluster AZ1.
•Start number 77 was manually annotated 1 time for cluster AZ1.

Info for manual annotations of cluster BB1:
•Start number 61 was manually annotated 1 time for cluster BB1.

Info for manual annotations of cluster BE1:
•Start number 26 was manually annotated 1 time for cluster BE1.
•Start number 37 was manually annotated 5 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 13 was manually annotated 10 times for cluster BE2.
•Start number 59 was manually annotated 1 time for cluster BE2.

Info for manual annotations of cluster BF:
•Start number 38 was manually annotated 1 time for cluster BF.
•Start number 63 was manually annotated 1 time for cluster BF.

Info for manual annotations of cluster BH:
•Start number 29 was manually annotated 1 time for cluster BH.

Info for manual annotations of cluster BK1:
•Start number 33 was manually annotated 1 time for cluster BK1.
•Start number 37 was manually annotated 2 times for cluster BK1.
•Start number 59 was manually annotated 6 times for cluster BK1.
•Start number 66 was manually annotated 2 times for cluster BK1.

Info for manual annotations of cluster BL:
•Start number 104 was manually annotated 1 time for cluster BL.

Info for manual annotations of cluster BS:
•Start number 38 was manually annotated 2 times for cluster BS.
•Start number 39 was manually annotated 1 time for cluster BS.
•Start number 50 was manually annotated 1 time for cluster BS.
•Start number 55 was manually annotated 2 times for cluster BS.
•Start number 57 was manually annotated 2 times for cluster BS.

Info for manual annotations of cluster BT:
•Start number 76 was manually annotated 3 times for cluster BT.

Info for manual annotations of cluster C2:
•Start number 32 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CE:
•Start number 59 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster CF:
•Start number 70 was manually annotated 2 times for cluster CF.

Info for manual annotations of cluster CG:
•Start number 37 was manually annotated 1 time for cluster CG.
•Start number 56 was manually annotated 1 time for cluster CG.

Info for manual annotations of cluster CQ1:
•Start number 41 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 41 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CS2:
•Start number 55 was manually annotated 1 time for cluster CS2.

Info for manual annotations of cluster DC2:
•Start number 69 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DD:
•Start number 41 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:
•Start number 43 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster DR:
•Start number 33 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster DV:
•Start number 73 was manually annotated 4 times for cluster DV.

Info for manual annotations of cluster EB:
•Start number 50 was manually annotated 2 times for cluster EB.
•Start number 81 was manually annotated 1 time for cluster EB.
•Start number 84 was manually annotated 1 time for cluster EB.
•Start number 86 was manually annotated 2 times for cluster EB.

Info for manual annotations of cluster FB:
•Start number 14 was manually annotated 1 time for cluster FB.
•Start number 24 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FC:
•Start number 33 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster GD1:
•Start number 29 was manually annotated 1 time for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 37 was manually annotated 1 time for cluster GD2.

Info for manual annotations of cluster H1:
•Start number 89 was manually annotated 1 time for cluster H1.

Info for manual annotations of cluster L2:
•Start number 48 was manually annotated 2 times for cluster L2.
•Start number 60 was manually annotated 5 times for cluster L2.
•Start number 62 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L4:
•Start number 54 was manually annotated 1 time for cluster L4.
•Start number 60 was manually annotated 1 time for cluster L4.

Info for manual annotations of cluster V:
•Start number 85 was manually annotated 2 times for cluster V.

Info for manual annotations of cluster X:
•Start number 16 was manually annotated 1 time for cluster X.

Gene Information:

Gene: A3Wally_146 Start: 90094, Stop: 90525, Start Num: 29
Candidate Starts for A3Wally_146:
(Start: 29 @90094 has 2 MA's), (167, 90337), (205, 90481),

Gene: AGrandiflora_41 Start: 29625, Stop: 30068, Start Num: 45
Candidate Starts for AGrandiflora_41:
(20, 29544), (Start: 45 @29625 has 1 MA's), (152, 29847),

Gene: Abscondus_40 Start: 17135, Stop: 17593, Start Num: 41
Candidate Starts for Abscondus_40:
(Start: 41 @17135 has 18 MA's),

Gene: AcciDwight_269 Start: 119645, Stop: 119103, Start Num: 13
Candidate Starts for AcciDwight_269:
(Start: 13 @119645 has 10 MA's), (53, 119522), (95, 119444), (136, 119342), (160, 119291), (163, 119288), (201, 119159),

Gene: Adolin_42 Start: 29874, Stop: 30347, Start Num: 51
Candidate Starts for Adolin_42:
(4, 29637), (Start: 51 @29874 has 2 MA's), (121, 30018), (164, 30111), (193, 30219),

Gene: Alone3_216 Start: 111609, Stop: 111190, Start Num: 55
Candidate Starts for Alone3_216:
(Start: 55 @111609 has 3 MA's), (117, 111495), (141, 111435), (151, 111426), (193, 111309), (204, 111258),

Gene: Alone3_188 Start: 97401, Stop: 96985, Start Num: 57
Candidate Starts for Alone3_188:
(Start: 57 @97401 has 2 MA's), (100, 97320), (135, 97230), (144, 97206), (194, 97071),

Gene: Alone3_117 Start: 62982, Stop: 63413, Start Num: 50
Candidate Starts for Alone3_117:

(Start: 50 @62982 has 3 MA's), (Start: 80 @63033 has 1 MA's), (101, 63066), (151, 63177), (207, 63345), (211, 63357),

Gene: Alone3_65 Start: 23323, Stop: 23781, Start Num: 38
Candidate Starts for Alone3_65:
(Start: 38 @23323 has 3 MA's), (114, 23473), (118, 23485), (129, 23518), (162, 23581), (170, 23593), (185, 23632), (193, 23674), (207, 23731), (213, 23752),

Gene: Alyssamiracle_26 Start: 15136, Stop: 15546, Start Num: 73
Candidate Starts for Alyssamiracle_26:
(58, 15115), (Start: 73 @15136 has 4 MA's), (87, 15160), (171, 15343), (186, 15403), (200, 15460), (202, 15469), (206, 15490), (213, 15511),

Gene: AnarQue_53 Start: 46202, Stop: 45753, Start Num: 33
Candidate Starts for AnarQue_53:
(Start: 33 @46202 has 3 MA's), (40, 46190), (138, 45992), (165, 45938), (204, 45800),

Gene: Anedea_217 Start: 106294, Stop: 106719, Start Num: 37
Candidate Starts for Anedea_217:
(Start: 37 @106294 has 9 MA's), (193, 106618), (196, 106627), (202, 106654), (203, 106666), (207, 106675), (218, 106711), (219, 106714),

Gene: Annadreamy_222 Start: 109759, Stop: 110133, Start Num: 59
Candidate Starts for Annadreamy_222:
(Start: 57 @109753 has 2 MA's), (Start: 59 @109759 has 9 MA's), (Start: 66 @109768 has 2 MA's), (185, 110005), (193, 110047), (200, 110074), (201, 110080),

Gene: Aphelion_41 Start: 17404, Stop: 17862, Start Num: 41
Candidate Starts for Aphelion_41:
(Start: 41 @17404 has 18 MA's),

Gene: AylexOG_3 Start: 681, Stop: 1040, Start Num: 83
Candidate Starts for AylexOG_3:
(83, 681), (142, 819), (152, 837),

Gene: Bachita_43 Start: 17837, Stop: 18295, Start Num: 41
Candidate Starts for Bachita_43:
(Start: 41 @17837 has 18 MA's),

Gene: Bantam_23 Start: 14778, Stop: 15239, Start Num: 43
Candidate Starts for Bantam_23:
(17, 14694), (Start: 43 @14778 has 2 MA's), (187, 15099), (208, 15198),

Gene: Bavilard_3 Start: 956, Stop: 1408, Start Num: 45
Candidate Starts for Bavilard_3:
(8, 791), (20, 872), (Start: 45 @956 has 1 MA's), (91, 1043), (134, 1151), (136, 1154), (185, 1277), (188, 1283), (192, 1310), (193, 1319),

Gene: Bimmel_31 Start: 19820, Stop: 19383, Start Num: 76
Candidate Starts for Bimmel_31:
(Start: 76 @19820 has 3 MA's), (168, 19634), (188, 19574), (207, 19475),

Gene: Bromden_104 Start: 63270, Stop: 63686, Start Num: 60

Candidate Starts for Bromden_104:
(Start: 60 @63270 has 6 MA's), (200, 63612),

Gene: Bromden_61 Start: 43963, Stop: 44400, Start Num: 54
Candidate Starts for Bromden_61:
(52, 43960), (Start: 54 @43963 has 1 MA's), (71, 43996), (94, 44038), (116, 44083), (145, 44158), (147, 44164), (205, 44353),

Gene: BrutonGaster_29 Start: 14029, Stop: 14475, Start Num: 41
Candidate Starts for BrutonGaster_29:
(Start: 41 @14029 has 18 MA's), (203, 14428),

Gene: Cardigan_40 Start: 19035, Stop: 19475, Start Num: 49
Candidate Starts for Cardigan_40:
(Start: 41 @19023 has 18 MA's), (49, 19035), (95, 19110), (139, 19218),

Gene: CeilingFan_266 Start: 120156, Stop: 119614, Start Num: 13
Candidate Starts for CeilingFan_266:
(Start: 13 @120156 has 10 MA's), (53, 120033), (95, 119955), (136, 119853), (160, 119802), (163, 119799), (201, 119670), (213, 119625),

Gene: Clown_83 Start: 53992, Stop: 54378, Start Num: 69
Candidate Starts for Clown_83:
(4, 53719), (5, 53737), (Start: 26 @53896 has 1 MA's), (30, 53917), (35, 53926), (47, 53947), (Start: 51 @53956 has 2 MA's), (Start: 69 @53992 has 1 MA's), (137, 54142), (166, 54202), (192, 54277),

Gene: ClubL_41 Start: 17326, Stop: 17784, Start Num: 41
Candidate Starts for ClubL_41:
(Start: 41 @17326 has 18 MA's),

Gene: Community_49 Start: 35475, Stop: 35966, Start Num: 28
Candidate Starts for Community_49:
(12, 35376), (Start: 28 @35475 has 1 MA's), (172, 35763), (205, 35910),

Gene: Crewmate_2 Start: 546, Stop: 995, Start Num: 51
Candidate Starts for Crewmate_2:
(Start: 51 @546 has 2 MA's), (192, 846),

Gene: Cucurbita_43 Start: 18696, Stop: 19154, Start Num: 41
Candidate Starts for Cucurbita_43:
(Start: 41 @18696 has 18 MA's),

Gene: Culver_41 Start: 17135, Stop: 17593, Start Num: 41
Candidate Starts for Culver_41:
(Start: 41 @17135 has 18 MA's),

Gene: Daubenski_27 Start: 12504, Stop: 12022, Start Num: 37
Candidate Starts for Daubenski_27:
(Start: 37 @12504 has 9 MA's), (116, 12348), (131, 12300), (144, 12270), (173, 12216), (176, 12201), (194, 12120), (207, 12066),

Gene: Davielle_179 Start: 95501, Stop: 95932, Start Num: 37
Candidate Starts for Davielle_179:

(Start: 37 @95501 has 9 MA's), (82, 95579), (135, 95705), (141, 95723), (192, 95834), (201, 95876),

Gene: DeluluLabubu_257 Start: 121131, Stop: 121556, Start Num: 59
Candidate Starts for DeluluLabubu_257:
(Start: 59 @121131 has 9 MA's), (117, 121248), (148, 121329), (154, 121338), (190, 121437), (193, 121455), (202, 121491), (217, 121545),

Gene: DeluluLabubu_105 Start: 68261, Stop: 68743, Start Num: 22
Candidate Starts for DeluluLabubu_105:
(22, 68261), (25, 68276), (123, 68492), (143, 68537), (165, 68570), (201, 68690), (207, 68714),

Gene: Dusty_40 Start: 17135, Stop: 17593, Start Num: 41
Candidate Starts for Dusty_40:
(Start: 41 @17135 has 18 MA's),

Gene: EGole_223 Start: 113552, Stop: 114001, Start Num: 26
Candidate Starts for EGole_223:
(Start: 26 @113552 has 1 MA's), (Start: 37 @113582 has 9 MA's), (135, 113783), (144, 113807), (173, 113852), (195, 113936), (208, 113981),

Gene: Engineer_42 Start: 17352, Stop: 17810, Start Num: 41
Candidate Starts for Engineer_42:
(Start: 41 @17352 has 18 MA's),

Gene: Erasmago_158 Start: 90400, Stop: 90855, Start Num: 37
Candidate Starts for Erasmago_158:
(Start: 37 @90400 has 9 MA's), (127, 90589),

Gene: Finemlucis_71 Start: 49120, Stop: 49566, Start Num: 48
Candidate Starts for Finemlucis_71:
(35, 49093), (44, 49108), (Start: 48 @49120 has 2 MA's), (150, 49336), (159, 49354), (194, 49468), (210, 49531), (214, 49543),

Gene: Forrest_254 Start: 120939, Stop: 121364, Start Num: 59
Candidate Starts for Forrest_254:
(Start: 59 @120939 has 9 MA's), (117, 121056), (148, 121137), (154, 121146), (193, 121263), (202, 121299), (217, 121353),

Gene: Forrest_150 Start: 82816, Stop: 83256, Start Num: 37
Candidate Starts for Forrest_150:
(Start: 37 @82816 has 9 MA's), (143, 83032), (156, 83056), (198, 83179), (207, 83215),

Gene: Fudan_66 Start: 22684, Stop: 23142, Start Num: 38
Candidate Starts for Fudan_66:
(Start: 38 @22684 has 3 MA's), (114, 22834), (118, 22846), (129, 22879), (162, 22942), (170, 22954), (185, 22993), (193, 23035), (207, 23092), (213, 23113),

Gene: GMA6_50 Start: 43670, Stop: 43215, Start Num: 31
Candidate Starts for GMA6_50:
(31, 43670), (111, 43520), (183, 43364), (185, 43352), (188, 43346), (207, 43253), (217, 43220),

Gene: Gabriela_68 Start: 47246, Stop: 47692, Start Num: 48
Candidate Starts for Gabriela_68:

(35, 47219), (44, 47234), (Start: 48 @47246 has 2 MA's), (150, 47462), (159, 47480), (194, 47594), (210, 47657), (214, 47669),

Gene: Gaia_140 Start: 75742, Stop: 76296, Start Num: 16
Candidate Starts for Gaia_140:
(7, 75664), (9, 75679), (10, 75685), (11, 75700), (Start: 16 @75742 has 1 MA's), (67, 75880), (138, 76036), (147, 76060), (200, 76222), (210, 76261),

Gene: Gardann_101 Start: 61924, Stop: 62331, Start Num: 60
Candidate Starts for Gardann_101:
(Start: 60 @61924 has 6 MA's), (115, 62029), (117, 62038), (180, 62173), (200, 62266), (206, 62296),

Gene: Geeche_40 Start: 17226, Stop: 17684, Start Num: 41
Candidate Starts for Geeche_40:
(Start: 41 @17226 has 18 MA's),

Gene: Genamy16_26 Start: 15136, Stop: 15546, Start Num: 73
Candidate Starts for Genamy16_26:
(58, 15115), (Start: 73 @15136 has 4 MA's), (87, 15160), (171, 15343), (186, 15403), (200, 15460), (202, 15469), (206, 15490), (213, 15511),

Gene: Gibbi_270 Start: 119649, Stop: 119107, Start Num: 13
Candidate Starts for Gibbi_270:
(Start: 13 @119649 has 10 MA's), (53, 119526), (95, 119448), (136, 119346), (160, 119295), (163, 119292), (201, 119163),

Gene: Ibantik_39 Start: 18281, Stop: 17859, Start Num: 80
Candidate Starts for Ibantik_39:
(Start: 80 @18281 has 1 MA's), (197, 17999),

Gene: Icarian_48 Start: 33307, Stop: 33684, Start Num: 81
Candidate Starts for Icarian_48:
(Start: 81 @33307 has 1 MA's), (150, 33460), (157, 33472), (202, 33622), (204, 33637), (205, 33640),

Gene: Jada_255 Start: 120179, Stop: 120604, Start Num: 59
Candidate Starts for Jada_255:
(Start: 59 @120179 has 9 MA's), (117, 120296), (148, 120377), (154, 120386), (193, 120503), (202, 120539), (217, 120593),

Gene: Jflix2_25 Start: 25439, Stop: 25867, Start Num: 70
Candidate Starts for Jflix2_25:
(1, 24707), (2, 24917), (Start: 70 @25439 has 2 MA's), (130, 25574), (153, 25619), (198, 25760), (205, 25793),

Gene: JimJam_268 Start: 121085, Stop: 120543, Start Num: 13
Candidate Starts for JimJam_268:
(Start: 13 @121085 has 10 MA's), (53, 120962), (95, 120884), (136, 120782), (160, 120731), (163, 120728), (201, 120599), (213, 120554),

Gene: JonJames_40 Start: 21238, Stop: 21690, Start Num: 41
Candidate Starts for JonJames_40:
(Start: 41 @21238 has 18 MA's), (49, 21250), (95, 21325), (139, 21433),

Gene: Kahlid_101 Start: 61842, Stop: 62249, Start Num: 60
Candidate Starts for Kahlid_101:
(Start: 60 @61842 has 6 MA's), (115, 61947), (117, 61956), (180, 62091), (200, 62184), (206, 62214),

Gene: Karp_197 Start: 102737, Stop: 102318, Start Num: 37
Candidate Starts for Karp_197:
(Start: 33 @102743 has 3 MA's), (Start: 37 @102737 has 9 MA's), (103, 102620), (135, 102542), (168, 102488), (193, 102416),

Gene: Kaylissa_41 Start: 29646, Stop: 30089, Start Num: 45
Candidate Starts for Kaylissa_41:
(20, 29565), (Start: 45 @29646 has 1 MA's), (152, 29868),

Gene: Kenrey_232 Start: 111193, Stop: 111606, Start Num: 59
Candidate Starts for Kenrey_232:
(Start: 59 @111193 has 9 MA's), (90, 111241), (191, 111484), (200, 111523), (216, 111580),

Gene: KentuckyRacer_267 Start: 121000, Stop: 120458, Start Num: 13
Candidate Starts for KentuckyRacer_267:
(Start: 13 @121000 has 10 MA's), (53, 120877), (95, 120799), (136, 120697), (160, 120646), (163, 120643), (201, 120514), (213, 120469),

Gene: Kovu_26 Start: 17736, Stop: 17326, Start Num: 59
Candidate Starts for Kovu_26:
(Start: 59 @17736 has 9 MA's), (Start: 61 @17733 has 1 MA's), (Start: 65 @17727 has 1 MA's), (67, 17721), (92, 17676), (96, 17667), (119, 17616), (133, 17574), (138, 17565), (159, 17520), (211, 17346),

Gene: Kumotta_5 Start: 4506, Stop: 5042, Start Num: 14
Candidate Starts for Kumotta_5:
(Start: 14 @4506 has 1 MA's), (Start: 24 @4554 has 1 MA's), (46, 4599), (147, 4821), (192, 4944), (206, 5010),

Gene: LazerLemon_75 Start: 51475, Stop: 51948, Start Num: 29
Candidate Starts for LazerLemon_75:
(Start: 29 @51475 has 2 MA's), (42, 51496), (79, 51565), (111, 51634), (147, 51721), (172, 51760), (181, 51793), (192, 51844), (203, 51901),

Gene: LeoJr_143 Start: 97416, Stop: 97838, Start Num: 37
Candidate Starts for LeoJr_143:
(Start: 37 @97416 has 9 MA's), (167, 97650), (213, 97824),

Gene: Limpid_229 Start: 115072, Stop: 115446, Start Num: 59
Candidate Starts for Limpid_229:
(Start: 57 @115066 has 2 MA's), (Start: 59 @115072 has 9 MA's), (Start: 66 @115081 has 2 MA's), (185, 115318), (193, 115360), (200, 115387), (201, 115393),

Gene: Lozinak_41 Start: 17407, Stop: 17865, Start Num: 41
Candidate Starts for Lozinak_41:
(Start: 41 @17407 has 18 MA's),

Gene: LuckySocke_64 Start: 22633, Stop: 23091, Start Num: 38
Candidate Starts for LuckySocke_64:

(Start: 38 @22633 has 3 MA's), (114, 22783), (118, 22795), (129, 22828), (162, 22891), (170, 22903), (185, 22942), (193, 22984), (207, 23041), (213, 23062),

Gene: Madraxi_29 Start: 27630, Stop: 28058, Start Num: 70
Candidate Starts for Madraxi_29:
(Start: 70 @27630 has 2 MA's), (130, 27765), (147, 27801), (153, 27810), (159, 27822), (198, 27951), (205, 27984),

Gene: Manuel_3 Start: 3413, Stop: 3811, Start Num: 63
Candidate Starts for Manuel_3:
(47, 3383), (Start: 63 @3413 has 1 MA's), (147, 3590),

Gene: MargaretKali_1 Start: 50, Stop: 577, Start Num: 24
Candidate Starts for MargaretKali_1:
(Start: 24 @50 has 1 MA's), (68, 152), (97, 206), (102, 221), (155, 341), (164, 359), (215, 542), (221, 569),

Gene: MaryV_93 Start: 56140, Stop: 56508, Start Num: 85
Candidate Starts for MaryV_93:
(Start: 85 @56140 has 2 MA's), (147, 56281), (192, 56398), (200, 56434), (204, 56458), (206, 56464), (213, 56485),

Gene: Milomuff_3 Start: 670, Stop: 1044, Start Num: 84
Candidate Starts for Milomuff_3:
(Start: 84 @670 has 1 MA's), (95, 694), (152, 826), (184, 910), (199, 979),

Gene: Miskis_39 Start: 17170, Stop: 17628, Start Num: 41
Candidate Starts for Miskis_39:
(Start: 41 @17170 has 18 MA's),

Gene: NiceHouse_61 Start: 34862, Stop: 35269, Start Num: 59
Candidate Starts for NiceHouse_61:
(Start: 59 @34862 has 9 MA's), (108, 34934), (109, 34937), (144, 35027), (175, 35078), (208, 35207), (212, 35219),

Gene: Nicholasp3_102 Start: 61924, Stop: 62331, Start Num: 60
Candidate Starts for Nicholasp3_102:
(Start: 60 @61924 has 6 MA's), (115, 62029), (117, 62038), (180, 62173), (200, 62266), (206, 62296),

Gene: Nitro_45 Start: 34067, Stop: 34558, Start Num: 28
Candidate Starts for Nitro_45:
(12, 33968), (Start: 28 @34067 has 1 MA's), (172, 34355), (205, 34502),

Gene: Norvs_42 Start: 17409, Stop: 17867, Start Num: 41
Candidate Starts for Norvs_42:
(Start: 41 @17409 has 18 MA's),

Gene: Nova53_72 Start: 59567, Stop: 59971, Start Num: 56
Candidate Starts for Nova53_72:
(7, 59375), (8, 59384), (15, 59447), (21, 59474), (23, 59489), (Start: 24 @59492 has 1 MA's), (Start: 56 @59567 has 1 MA's), (75, 59603), (108, 59657), (144, 59753), (205, 59936), (208, 59942),

Gene: Nova53_188 Start: 99250, Stop: 99705, Start Num: 37

Candidate Starts for Nova53_188:
(27, 99220), (Start: 37 @99250 has 9 MA's), (144, 99475), (208, 99667),

Gene: Park1214_226 Start: 111129, Stop: 110710, Start Num: 55
Candidate Starts for Park1214_226:
(Start: 55 @111129 has 3 MA's), (117, 111015), (141, 110955), (151, 110946), (193, 110829), (204, 110778),

Gene: Park1214_79 Start: 27965, Stop: 28336, Start Num: 75
Candidate Starts for Park1214_79:
(75, 27965), (98, 28007), (126, 28079), (160, 28142), (192, 28226), (215, 28316),

Gene: PastaFagioli_42 Start: 29819, Stop: 30232, Start Num: 50
Candidate Starts for PastaFagioli_42:
(Start: 50 @29819 has 3 MA's), (110, 29933), (129, 29984), (152, 30026), (174, 30068), (186, 30098), (201, 30170),

Gene: PastaFagioli_61 Start: 39171, Stop: 39551, Start Num: 86
Candidate Starts for PastaFagioli_61:
(Start: 86 @39171 has 2 MA's),

Gene: Persimmon_179 Start: 94749, Stop: 95180, Start Num: 37
Candidate Starts for Persimmon_179:
(Start: 37 @94749 has 9 MA's), (82, 94827), (135, 94953), (141, 94971), (192, 95082), (201, 95124),

Gene: Phabba_53 Start: 19044, Stop: 18553, Start Num: 32
Candidate Starts for Phabba_53:
(Start: 32 @19044 has 1 MA's), (Start: 38 @19035 has 3 MA's), (68, 18975), (93, 18933), (168, 18795), (171, 18789), (184, 18732), (202, 18651), (215, 18606),

Gene: PhinkBoden_41 Start: 17790, Stop: 18248, Start Num: 41
Candidate Starts for PhinkBoden_41:
(Start: 41 @17790 has 18 MA's),

Gene: Predator_10 Start: 6815, Stop: 7189, Start Num: 89
Candidate Starts for Predator_10:
(Start: 89 @6815 has 1 MA's), (132, 6929), (149, 6965), (158, 6980), (182, 7025), (188, 7046), (198, 7103), (210, 7145), (213, 7157), (217, 7169), (218, 7175),

Gene: PumpkinSpice_263 Start: 119441, Stop: 118899, Start Num: 13
Candidate Starts for PumpkinSpice_263:
(Start: 13 @119441 has 10 MA's), (53, 119318), (99, 119231), (136, 119138), (160, 119087), (163, 119084), (201, 118955),

Gene: Quby_89 Start: 56408, Stop: 56815, Start Num: 69
Candidate Starts for Quby_89:
(Start: 69 @56408 has 1 MA's), (112, 56486), (162, 56591), (164, 56594), (174, 56615), (184, 56660), (187, 56666), (202, 56741), (220, 56807),

Gene: Quenya_41 Start: 29700, Stop: 30113, Start Num: 50
Candidate Starts for Quenya_41:
(Start: 50 @29700 has 3 MA's), (129, 29865), (152, 29907), (163, 29928), (201, 30051),

Gene: RazorC_24 Start: 15136, Stop: 15528, Start Num: 73
Candidate Starts for RazorC_24:
(58, 15115), (Start: 73 @15136 has 4 MA's), (87, 15160), (105, 15202), (113, 15220), (201, 15463), (206, 15487),

Gene: ReginaGlobina_142 Start: 97638, Stop: 98060, Start Num: 37
Candidate Starts for ReginaGlobina_142:
(Start: 37 @97638 has 9 MA's), (167, 97872), (213, 98046),

Gene: Rikishi_261 Start: 119623, Stop: 119081, Start Num: 13
Candidate Starts for Rikishi_261:
(Start: 13 @119623 has 10 MA's), (53, 119500), (95, 119422), (136, 119320), (160, 119269), (163, 119266), (201, 119137),

Gene: RosePharie_70 Start: 35737, Stop: 36186, Start Num: 38
Candidate Starts for RosePharie_70:
(Start: 38 @35737 has 3 MA's), (122, 35896), (140, 35941), (152, 35956), (164, 35980), (185, 36025), (191, 36055), (192, 36058), (198, 36088), (210, 36133),

Gene: Rowa_60 Start: 40584, Stop: 40913, Start Num: 104
Candidate Starts for Rowa_60:
(95, 40563), (Start: 104 @40584 has 1 MA's), (146, 40692), (149, 40695), (169, 40731), (199, 40848), (211, 40890),

Gene: Rumpelstiltskin_98 Start: 61717, Stop: 62124, Start Num: 60
Candidate Starts for Rumpelstiltskin_98:
(Start: 60 @61717 has 6 MA's), (115, 61822), (117, 61831), (180, 61966), (200, 62059), (206, 62089),

Gene: RunningOnE_42 Start: 18641, Stop: 18213, Start Num: 76
Candidate Starts for RunningOnE_42:
(Start: 76 @18641 has 3 MA's), (152, 18488), (168, 18461), (194, 18362), (213, 18284),

Gene: SFuller_27 Start: 26032, Stop: 26460, Start Num: 70
Candidate Starts for SFuller_27:
(Start: 70 @26032 has 2 MA's), (130, 26167), (147, 26203), (153, 26212), (159, 26224), (198, 26353), (205, 26386),

Gene: SFuller_99 Start: 58114, Stop: 58551, Start Num: 36
Candidate Starts for SFuller_99:
(36, 58114), (88, 58195), (138, 58291), (164, 58342), (188, 58414), (192, 58441), (201, 58483),

Gene: SJReid_133 Start: 86260, Stop: 86706, Start Num: 33
Candidate Starts for SJReid_133:
(Start: 33 @86260 has 3 MA's), (167, 86530), (176, 86548),

Gene: SansAfet_62 Start: 38774, Stop: 39154, Start Num: 86
Candidate Starts for SansAfet_62:
(Start: 86 @38774 has 2 MA's), (188, 39017), (192, 39044),

Gene: Schaffner_27 Start: 23138, Stop: 23539, Start Num: 65
Candidate Starts for Schaffner_27:
(3, 22853), (6, 22994), (Start: 65 @23138 has 1 MA's), (125, 23255), (147, 23300), (178, 23369), (179, 23372), (189, 23414), (193, 23444), (196, 23453), (201, 23477),

Gene: Sham_181 Start: 98652, Stop: 99035, Start Num: 66
Candidate Starts for Sham_181:
(Start: 59 @98640 has 9 MA's), (Start: 66 @98652 has 2 MA's), (161, 98844), (188, 98907), (207, 99000), (216, 99027),

Gene: Shawty_32 Start: 26307, Stop: 26723, Start Num: 61
Candidate Starts for Shawty_32:
(Start: 61 @26307 has 1 MA's), (107, 26400), (124, 26439), (201, 26661), (208, 26688),

Gene: Smoothie_42 Start: 17407, Stop: 17865, Start Num: 41
Candidate Starts for Smoothie_42:
(Start: 41 @17407 has 18 MA's),

Gene: Solea_3 Start: 670, Stop: 1044, Start Num: 84
Candidate Starts for Solea_3:
(Start: 84 @670 has 1 MA's), (95, 694), (152, 826), (184, 910), (199, 979),

Gene: SpeedDemon_240 Start: 15094, Stop: 15555, Start Num: 43
Candidate Starts for SpeedDemon_240:
(Start: 43 @15094 has 2 MA's), (188, 15418), (193, 15454), (208, 15514),

Gene: Spelly_265 Start: 118353, Stop: 117811, Start Num: 13
Candidate Starts for Spelly_265:
(Start: 13 @118353 has 10 MA's), (53, 118230), (95, 118152), (136, 118050), (160, 117999), (163, 117996), (201, 117867), (213, 117822),

Gene: Spilled_268 Start: 120017, Stop: 119475, Start Num: 13
Candidate Starts for Spilled_268:
(Start: 13 @120017 has 10 MA's), (53, 119894), (95, 119816), (136, 119714), (160, 119663), (163, 119660), (201, 119531), (213, 119486),

Gene: Spooks_32 Start: 20834, Stop: 20397, Start Num: 76
Candidate Starts for Spooks_32:
(Start: 76 @20834 has 3 MA's), (152, 20675), (168, 20648), (185, 20594), (188, 20588), (207, 20489),

Gene: StarPlatinum_46 Start: 22656, Stop: 23042, Start Num: 59
Candidate Starts for StarPlatinum_46:
(Start: 59 @22656 has 9 MA's), (135, 22809), (184, 22911), (193, 22953), (201, 22986), (205, 23007), (213, 23031),

Gene: Starbow_257 Start: 118397, Stop: 117855, Start Num: 13
Candidate Starts for Starbow_257:
(Start: 13 @118397 has 10 MA's), (53, 118274), (95, 118196), (136, 118094), (160, 118043), (163, 118040), (201, 117911), (213, 117866),

Gene: SteveFrench_16 Start: 15937, Stop: 16392, Start Num: 55
Candidate Starts for SteveFrench_16:
(18, 15832), (34, 15898), (Start: 55 @15937 has 3 MA's), (64, 15955), (106, 16036), (155, 16144), (164, 16162), (205, 16327), (218, 16369),

Gene: Success_33 Start: 20053, Stop: 19616, Start Num: 76
Candidate Starts for Success_33:

(Start: 76 @20053 has 3 MA's), (152, 19894), (185, 19813), (188, 19807), (207, 19708),

Gene: Talos_188 Start: 95931, Stop: 95515, Start Num: 57
Candidate Starts for Talos_188:
(Start: 57 @95931 has 2 MA's), (100, 95850), (135, 95760), (144, 95736), (194, 95601),

Gene: Talos_64 Start: 22480, Stop: 22926, Start Num: 39
Candidate Starts for Talos_64:
(Start: 39 @22480 has 1 MA's), (72, 22543), (78, 22552), (118, 22636), (120, 22642), (185, 22783), (193, 22825), (210, 22891),

Gene: Talos_215 Start: 109729, Stop: 109310, Start Num: 55
Candidate Starts for Talos_215:
(Start: 55 @109729 has 3 MA's), (117, 109615), (141, 109555), (151, 109546), (193, 109429), (204, 109378),

Gene: TomSawyer_265 Start: 121328, Stop: 120786, Start Num: 13
Candidate Starts for TomSawyer_265:
(Start: 13 @121328 has 10 MA's), (95, 121127), (136, 121025), (160, 120974), (163, 120971), (201, 120842), (213, 120797),

Gene: Toniann_41 Start: 17352, Stop: 17810, Start Num: 41
Candidate Starts for Toniann_41:
(Start: 41 @17352 has 18 MA's),

Gene: Tuck_30 Start: 24609, Stop: 25010, Start Num: 77
Candidate Starts for Tuck_30:
(Start: 77 @24609 has 1 MA's), (125, 24726), (147, 24771), (180, 24849), (193, 24915), (196, 24924),

Gene: TunaTartare_189 Start: 100701, Stop: 101084, Start Num: 66
Candidate Starts for TunaTartare_189:
(Start: 59 @100689 has 9 MA's), (Start: 66 @100701 has 2 MA's), (161, 100893), (188, 100956), (207, 101049), (216, 101076),

Gene: TunaTartare_254 Start: 124119, Stop: 124544, Start Num: 59
Candidate Starts for TunaTartare_254:
(Start: 59 @124119 has 9 MA's), (117, 124236), (148, 124317), (154, 124326), (193, 124443), (198, 124464), (202, 124479), (217, 124533),

Gene: Underpass_94 Start: 56960, Stop: 57367, Start Num: 60
Candidate Starts for Underpass_94:
(Start: 60 @56960 has 6 MA's), (115, 57065), (117, 57074), (180, 57209), (200, 57302), (206, 57332),

Gene: Vetrix_100 Start: 61960, Stop: 62376, Start Num: 62
Candidate Starts for Vetrix_100:
(Start: 60 @61957 has 6 MA's), (Start: 62 @61960 has 1 MA's), (74, 61978), (200, 62299),

Gene: Westy_204 Start: 103797, Stop: 103372, Start Num: 33
Candidate Starts for Westy_204:
(Start: 33 @103797 has 3 MA's), (Start: 37 @103791 has 9 MA's), (103, 103674), (135, 103596), (168, 103542), (193, 103470),

Gene: WhereRU_178 Start: 95501, Stop: 95932, Start Num: 37

Candidate Starts for WhereRU_178:
(Start: 37 @95501 has 9 MA's), (82, 95579), (135, 95705), (141, 95723), (192, 95834), (201, 95876),

Gene: Wildcat_93 Start: 56150, Stop: 56518, Start Num: 85
Candidate Starts for Wildcat_93:
(Start: 85 @56150 has 2 MA's), (147, 56291), (192, 56408), (200, 56444), (204, 56468), (206, 56474), (213, 56495),

Gene: WilliamBoone_41 Start: 16716, Stop: 17174, Start Num: 41
Candidate Starts for WilliamBoone_41:
(Start: 41 @16716 has 18 MA's),

Gene: Wipeout_252 Start: 120280, Stop: 119738, Start Num: 13
Candidate Starts for Wipeout_252:
(Start: 13 @120280 has 10 MA's), (53, 120157), (99, 120070), (136, 119977), (160, 119926), (163, 119923), (201, 119794),

Gene: Yang_45 Start: 32671, Stop: 33198, Start Num: 19
Candidate Starts for Yang_45:
(Start: 19 @32671 has 1 MA's), (128, 32941), (147, 32983), (194, 33112), (209, 33175),

Gene: Yvonnetastic_38 Start: 18787, Stop: 19239, Start Num: 41
Candidate Starts for Yvonnetastic_38:
(Start: 41 @18787 has 18 MA's), (49, 18799), (95, 18874), (139, 18982),

Gene: Zany_25 Start: 17287, Stop: 17679, Start Num: 73
Candidate Starts for Zany_25:
(58, 17266), (Start: 73 @17287 has 4 MA's), (87, 17311), (105, 17353), (113, 17371), (201, 17614), (206, 17638),

Gene: Zooman_139 Start: 88579, Stop: 89034, Start Num: 37
Candidate Starts for Zooman_139:
(Start: 37 @88579 has 9 MA's), (127, 88768), (135, 88783), (177, 88858),