Pham 285537

1: ReMo_96 + 9

2: Fowlmouth_48 + 1

3: Aphelion_172 + 10

4: Culver_177

5: Miskis_166

6: OneUp_158

7: BrutonGaster_156

8: AluminumJesus_90 + 1

9: Viceroy_92 + 15

10: BabyDotz_91 + 5

11: Fizzles_91

12: Altheas_96

13: Mentos_97 + 9

14: MorillMayhem_92 + 2

15: Phinky_98

16: Squash_95

17: Gingerbug_34

18: Wrackline_46

19: Tailonex_73
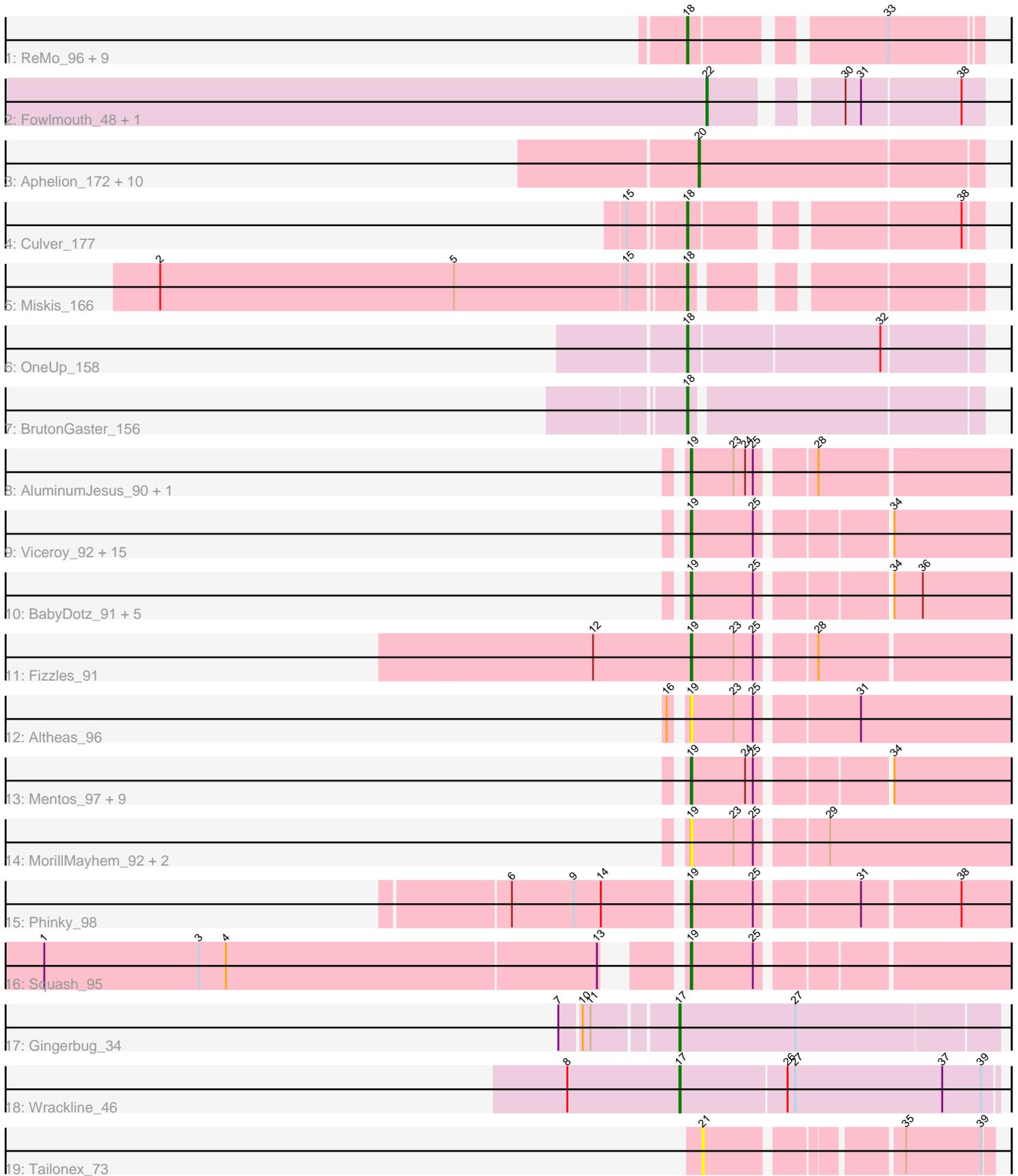
Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 285537 Report

This analysis was run 03/28/26 on database version 641.

Pham number 285537 has 71 members, 8 are drafts.

Phages represented in each track:
• Track 1 : ReMo_96, Looper_95, LastResort_96, Anaysia_98, Switzerland_96, Epsocamisio_96, JSwag_99, Boohoo_97, Nebulosus_95, ShayRa_96
• Track 2 : Fowlmouth_48, MrMiyagi_47
• Track 3 : Aphelion_172, WilliamBoone_179, Smoothie_175, ClubL_174, Cucurbita_173, Bachita_176, Toniann_174, PhinkBoden_171, Lozinak_174, Geeche_178, Norvs_171
• Track 4 : Culver_177
• Track 5 : Miskis_166
• Track 6 : OneUp_158
• Track 7 : BrutonGaster_156
• Track 8 : AluminumJesus_90, Gazebo_92
• Track 9 : Viceroy_92, FrankDeliGuy_91, Rudy_91, DonaldDuck_93, Judebell_93, Hyperion_92, Zagie_95, Llemily_93, Lonelysoil_91, Mashley_92, Nike_91, Kyva_98, Sillytadpoles_94, Zhafia_96, Quammi_93, SlySloth_95
• Track 10 : BabyDotz_91, EverythinBagel_91, Casend_94, Rowlf_90, Blab_90, Statler_96
• Track 11 : Fizzles_91
• Track 12 : Altheas_96
• Track 13 : Mentos_97, Wheelie_93, Namago_95, StrawberryJamm_99, SallyK_95, Wayne3_95, Teehee_94, Grassboy_98, Phabia_93, Jehoshaphat_95
• Track 14 : MorillMayhem_92, BaconCheese_96, Mila11_94
• Track 15 : Phinky_98
• Track 16 : Squash_95
• Track 17 : Gingerbug_34
• Track 18 : Wrackline_46
• Track 19 : Tailonex_73

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

The start number called the most often in the published annotations is 19, it was called in 35 of the 63 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Altheas_96, AluminumJesus_90, BabyDotz_91, BaconCheese_96, Blab_90, Casend_94, DonaldDuck_93, EverythinBagel_91, Fizzles_91, FrankDeliGuy_91, Gazebo_92, Grassboy_98, Hyperion_92, Jehoshaphat_95, Judebell_93, Kyva_98, Llemily_93, Lonelysoil_91, Mashley_92, Mentos_97, Mila11_94, MorillMayhem_92, Namago_95, Nike_91, Phabia_93, Phinky_98, Quammi_93, Rowlf_90, Rudy_91, SallyK_95, Sillytadpoles_94, SlySloth_95, Squash_95, Statler_96, StrawberryJamm_99, Teehee_94, Viceroy_92, Wayne3_95, Wheelie_93, Zagie_95, Zhafia_96,

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

Genes that do not have the "Most Annotated" start:
• Anaysia_98, Aphelion_172, Bachita_176, Boohoo_97, BrutonGaster_156, ClubL_174, Cucurbita_173, Culver_177, Epsocamisio_96, Fowlmouth_48, Geeche_178, Gingerbug_34, JSwag_99, LastResort_96, Looper_95, Lozinak_174, Miskis_166, MrMiyagi_47, Nebulosus_95, Norvs_171, OneUp_158, PhinkBoden_171, ReMo_96, ShayRa_96, Smoothie_175, Switzerland_96, Tailonex_73, Toniann_174, WilliamBoone_179, Wrackline_46,

Summary by start number:

Start 17:
• Found in 2 of 71 (2.8%) of genes in pham
• Manual Annotations of this start: 2 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gingerbug_34 (GF), Wrackline_46 (GF),

Start 18:
• Found in 14 of 71 (19.7%) of genes in pham
• Manual Annotations of this start: 14 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anaysia_98 (A15), Boohoo_97 (A15), BrutonGaster_156 (CQ2), Culver_177 (CQ1), Epsocamisio_96 (A15), JSwag_99 (A15), LastResort_96 (A15), Looper_95 (A15), Miskis_166 (CQ1), Nebulosus_95 (A15), OneUp_158 (CQ2), ReMo_96 (A15), ShayRa_96 (A15), Switzerland_96 (A15),

Start 19:
• Found in 41 of 71 (57.7%) of genes in pham
• Manual Annotations of this start: 35 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Altheas_96 (EG), AluminumJesus_90 (EG), BabyDotz_91 (EG), BaconCheese_96 (EG), Blab_90 (EG), Casend_94 (EG), DonaldDuck_93 (EG), EverythinBagel_91 (EG), Fizzles_91 (EG), FrankDeliGuy_91 (EG), Gazebo_92 (EG), Grassboy_98 (EG), Hyperion_92 (EG), Jehoshaphat_95 (EG), Judebell_93 (EG), Kyva_98 (EG), Llemily_93 (EG), Lonelysoil_91 (EG), Mashley_92 (EG), Mentos_97 (EG), Mila11_94 (EG), MorillMayhem_92 (EG), Namago_95 (EG), Nike_91 (EG), Phabia_93 (EG), Phinky_98 (EG), Quammi_93 (EG), Rowlf_90 (EG), Rudy_91 (EG), SallyK_95 (EG), Sillytadpoles_94 (EG), SlySloth_95 (EG), Squash_95 (EG), Statler_96 (EG), StrawberryJamm_99 (EG), Teehee_94 (EG), Viceroy_92 (EG), Wayne3_95 (EG), Wheelie_93 (EG), Zagie_95 (EG), Zhafia_96 (EG),

Start 20:
• Found in 11 of 71 (15.5%) of genes in pham
• Manual Annotations of this start: 10 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aphelion_172 (CQ1), Bachita_176 (CQ1), ClubL_174 (CQ1), Cucurbita_173 (CQ1), Geeche_178 (CQ1), Lozinak_174 (CQ1), Norvs_171 (CQ1), PhinkBoden_171 (CQ1), Smoothie_175 (CQ1), Toniann_174 (CQ1), WilliamBoone_179 (CQ1),

Start 21:
• Found in 1 of 71 (1.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Tailonex_73 (singleton),

Start 22:
• Found in 2 of 71 (2.8%) of genes in pham
• Manual Annotations of this start: 2 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fowlmouth_48 (AC), MrMiyagi_47 (AC),

Summary by clusters:

There are 7 clusters represented in this pham: A15, AC, EG, singleton, GF, CQ2, CQ1,

Info for manual annotations of cluster A15:
•Start number 18 was manually annotated 10 times for cluster A15.

Info for manual annotations of cluster AC:
•Start number 22 was manually annotated 2 times for cluster AC.

Info for manual annotations of cluster CQ1:
•Start number 18 was manually annotated 2 times for cluster CQ1.
•Start number 20 was manually annotated 10 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 18 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster EG:
•Start number 19 was manually annotated 35 times for cluster EG.

Info for manual annotations of cluster GF:
•Start number 17 was manually annotated 2 times for cluster GF.

Gene Information:
Gene: Altheas_96 Start: 58403, Stop: 58167, Start Num: 19
Candidate Starts for Altheas_96:
(16, 58412), (Start: 19 @58403 has 35 MA's), (23, 58370), (25, 58355), (31, 58283),

Gene: AluminumJesus_90 Start: 56836, Stop: 56606, Start Num: 19
Candidate Starts for AluminumJesus_90:
(Start: 19 @56836 has 35 MA's), (23, 56803), (24, 56794), (25, 56788), (28, 56749),

Gene: Anaysia_98 Start: 50449, Stop: 50252, Start Num: 18
Candidate Starts for Anaysia_98:
(Start: 18 @50449 has 14 MA's), (33, 50320),

Gene: Aphelion_172 Start: 87944, Stop: 87729, Start Num: 20
Candidate Starts for Aphelion_172:
(Start: 20 @87944 has 10 MA's),

Gene: BabyDotz_91 Start: 58703, Stop: 58476, Start Num: 19
Candidate Starts for BabyDotz_91:
(Start: 19 @58703 has 35 MA's), (25, 58655), (34, 58565), (36, 58544),

Gene: Bachita_176 Start: 88020, Stop: 87805, Start Num: 20
Candidate Starts for Bachita_176:
(Start: 20 @88020 has 10 MA's),

Gene: BaconCheese_96 Start: 58803, Stop: 58567, Start Num: 19
Candidate Starts for BaconCheese_96:
(Start: 19 @58803 has 35 MA's), (23, 58770), (25, 58755), (29, 58707),

Gene: Blab_90 Start: 57409, Stop: 57182, Start Num: 19
Candidate Starts for Blab_90:
(Start: 19 @57409 has 35 MA's), (25, 57361), (34, 57271), (36, 57250),

Gene: Boohoo_97 Start: 49766, Stop: 49569, Start Num: 18
Candidate Starts for Boohoo_97:
(Start: 18 @49766 has 14 MA's), (33, 49637),

Gene: BrutonGaster_156 Start: 84309, Stop: 84094, Start Num: 18
Candidate Starts for BrutonGaster_156:
(Start: 18 @84309 has 14 MA's),

Gene: Casend_94 Start: 58038, Stop: 57811, Start Num: 19
Candidate Starts for Casend_94:
(Start: 19 @58038 has 35 MA's), (25, 57990), (34, 57900), (36, 57879),

Gene: ClubL_174 Start: 87265, Stop: 87050, Start Num: 20
Candidate Starts for ClubL_174:
(Start: 20 @87265 has 10 MA's),

Gene: Cucurbita_173 Start: 88326, Stop: 88111, Start Num: 20
Candidate Starts for Cucurbita_173:
(Start: 20 @88326 has 10 MA's),

Gene: Culver_177 Start: 86978, Stop: 86781, Start Num: 18
Candidate Starts for Culver_177:
(15, 87017), (Start: 18 @86978 has 14 MA's), (38, 86795),

Gene: DonaldDuck_93 Start: 57438, Stop: 57211, Start Num: 19

Candidate Starts for DonaldDuck_93:
(Start: 19 @57438 has 35 MA's), (25, 57390), (34, 57300),

Gene: Epsocamisio_96 Start: 50125, Stop: 49928, Start Num: 18
Candidate Starts for Epsocamisio_96:
(Start: 18 @50125 has 14 MA's), (33, 49996),

Gene: EverythinBagel_91 Start: 57233, Stop: 57006, Start Num: 19
Candidate Starts for EverythinBagel_91:
(Start: 19 @57233 has 35 MA's), (25, 57185), (34, 57095), (36, 57074),

Gene: Fizzles_91 Start: 57426, Stop: 57196, Start Num: 19
Candidate Starts for Fizzles_91:
(12, 57501), (Start: 19 @57426 has 35 MA's), (23, 57393), (25, 57378), (28, 57339),

Gene: Fowlmouth_48 Start: 36213, Stop: 36398, Start Num: 22
Candidate Starts for Fowlmouth_48:
(Start: 22 @36213 has 2 MA's), (30, 36294), (31, 36306), (38, 36381),

Gene: FrankDeliGuy_91 Start: 57716, Stop: 57489, Start Num: 19
Candidate Starts for FrankDeliGuy_91:
(Start: 19 @57716 has 35 MA's), (25, 57668), (34, 57578),

Gene: Gazebo_92 Start: 57414, Stop: 57184, Start Num: 19
Candidate Starts for Gazebo_92:
(Start: 19 @57414 has 35 MA's), (23, 57381), (24, 57372), (25, 57366), (28, 57327),

Gene: Geeche_178 Start: 88689, Stop: 88474, Start Num: 20
Candidate Starts for Geeche_178:
(Start: 20 @88689 has 10 MA's),

Gene: Gingerbug_34 Start: 23484, Stop: 23242, Start Num: 17
Candidate Starts for Gingerbug_34:
(7, 23565), (10, 23550), (11, 23544), (Start: 17 @23484 has 2 MA's), (27, 23394),

Gene: Grassboy_98 Start: 58339, Stop: 58112, Start Num: 19
Candidate Starts for Grassboy_98:
(Start: 19 @58339 has 35 MA's), (24, 58297), (25, 58291), (34, 58201),

Gene: Hyperion_92 Start: 57476, Stop: 57249, Start Num: 19
Candidate Starts for Hyperion_92:
(Start: 19 @57476 has 35 MA's), (25, 57428), (34, 57338),

Gene: JSwag_99 Start: 49973, Stop: 49776, Start Num: 18
Candidate Starts for JSwag_99:
(Start: 18 @49973 has 14 MA's), (33, 49844),

Gene: Jehoshaphat_95 Start: 58072, Stop: 57845, Start Num: 19
Candidate Starts for Jehoshaphat_95:
(Start: 19 @58072 has 35 MA's), (24, 58030), (25, 58024), (34, 57934),

Gene: Judebell_93 Start: 57470, Stop: 57243, Start Num: 19
Candidate Starts for Judebell_93:

(Start: 19 @57470 has 35 MA's), (25, 57422), (34, 57332),

Gene: Kyva_98 Start: 58363, Stop: 58136, Start Num: 19
Candidate Starts for Kyva_98:
(Start: 19 @58363 has 35 MA's), (25, 58315), (34, 58225),

Gene: LastResort_96 Start: 50207, Stop: 50010, Start Num: 18
Candidate Starts for LastResort_96:
(Start: 18 @50207 has 14 MA's), (33, 50078),

Gene: Llemily_93 Start: 57133, Stop: 56906, Start Num: 19
Candidate Starts for Llemily_93:
(Start: 19 @57133 has 35 MA's), (25, 57085), (34, 56995),

Gene: Lonelysoil_91 Start: 56893, Stop: 56666, Start Num: 19
Candidate Starts for Lonelysoil_91:
(Start: 19 @56893 has 35 MA's), (25, 56845), (34, 56755),

Gene: Looper_95 Start: 49056, Stop: 48859, Start Num: 18
Candidate Starts for Looper_95:
(Start: 18 @49056 has 14 MA's), (33, 48927),

Gene: Lozinak_174 Start: 87869, Stop: 87654, Start Num: 20
Candidate Starts for Lozinak_174:
(Start: 20 @87869 has 10 MA's),

Gene: Mashley_92 Start: 57565, Stop: 57338, Start Num: 19
Candidate Starts for Mashley_92:
(Start: 19 @57565 has 35 MA's), (25, 57517), (34, 57427),

Gene: Mentos_97 Start: 58524, Stop: 58297, Start Num: 19
Candidate Starts for Mentos_97:
(Start: 19 @58524 has 35 MA's), (24, 58482), (25, 58476), (34, 58386),

Gene: Mila11_94 Start: 58854, Stop: 58618, Start Num: 19
Candidate Starts for Mila11_94:
(Start: 19 @58854 has 35 MA's), (23, 58821), (25, 58806), (29, 58758),

Gene: Miskis_166 Start: 86835, Stop: 86647, Start Num: 18
Candidate Starts for Miskis_166:
(2, 87228), (5, 87000), (15, 86868), (Start: 18 @86835 has 14 MA's),

Gene: MorillMayhem_92 Start: 57693, Stop: 57457, Start Num: 19
Candidate Starts for MorillMayhem_92:
(Start: 19 @57693 has 35 MA's), (23, 57660), (25, 57645), (29, 57597),

Gene: MrMiyagi_47 Start: 36597, Stop: 36782, Start Num: 22
Candidate Starts for MrMiyagi_47:
(Start: 22 @36597 has 2 MA's), (30, 36678), (31, 36690), (38, 36765),

Gene: Namago_95 Start: 57620, Stop: 57393, Start Num: 19
Candidate Starts for Namago_95:
(Start: 19 @57620 has 35 MA's), (24, 57578), (25, 57572), (34, 57482),

Gene: Nebulosus_95 Start: 49764, Stop: 49567, Start Num: 18
Candidate Starts for Nebulosus_95:
(Start: 18 @49764 has 14 MA's), (33, 49635),

Gene: Nike_91 Start: 57838, Stop: 57611, Start Num: 19
Candidate Starts for Nike_91:
(Start: 19 @57838 has 35 MA's), (25, 57790), (34, 57700),

Gene: Norvs_171 Start: 87045, Stop: 86830, Start Num: 20
Candidate Starts for Norvs_171:
(Start: 20 @87045 has 10 MA's),

Gene: OneUp_158 Start: 86856, Stop: 86638, Start Num: 18
Candidate Starts for OneUp_158:
(Start: 18 @86856 has 14 MA's), (32, 86712),

Gene: Phabia_93 Start: 57470, Stop: 57243, Start Num: 19
Candidate Starts for Phabia_93:
(Start: 19 @57470 has 35 MA's), (24, 57428), (25, 57422), (34, 57332),

Gene: PhinkBoden_171 Start: 87443, Stop: 87228, Start Num: 20
Candidate Starts for PhinkBoden_171:
(Start: 20 @87443 has 10 MA's),

Gene: Phinky_98 Start: 59193, Stop: 58963, Start Num: 19
Candidate Starts for Phinky_98:
(6, 59322), (9, 59274), (14, 59253), (Start: 19 @59193 has 35 MA's), (25, 59145), (31, 59073), (38, 59001),

Gene: Quammi_93 Start: 57415, Stop: 57188, Start Num: 19
Candidate Starts for Quammi_93:
(Start: 19 @57415 has 35 MA's), (25, 57367), (34, 57277),

Gene: ReMo_96 Start: 50190, Stop: 49993, Start Num: 18
Candidate Starts for ReMo_96:
(Start: 18 @50190 has 14 MA's), (33, 50061),

Gene: Rowlf_90 Start: 57283, Stop: 57056, Start Num: 19
Candidate Starts for Rowlf_90:
(Start: 19 @57283 has 35 MA's), (25, 57235), (34, 57145), (36, 57124),

Gene: Rudy_91 Start: 57281, Stop: 57054, Start Num: 19
Candidate Starts for Rudy_91:
(Start: 19 @57281 has 35 MA's), (25, 57233), (34, 57143),

Gene: SallyK_95 Start: 58436, Stop: 58209, Start Num: 19
Candidate Starts for SallyK_95:
(Start: 19 @58436 has 35 MA's), (24, 58394), (25, 58388), (34, 58298),

Gene: ShayRa_96 Start: 48822, Stop: 48625, Start Num: 18
Candidate Starts for ShayRa_96:
(Start: 18 @48822 has 14 MA's), (33, 48693),

Gene: Sillytadpoles_94 Start: 57121, Stop: 56894, Start Num: 19
Candidate Starts for Sillytadpoles_94:
(Start: 19 @57121 has 35 MA's), (25, 57073), (34, 56983),

Gene: SlySloth_95 Start: 57237, Stop: 57010, Start Num: 19
Candidate Starts for SlySloth_95:
(Start: 19 @57237 has 35 MA's), (25, 57189), (34, 57099),

Gene: Smoothie_175 Start: 87741, Stop: 87526, Start Num: 20
Candidate Starts for Smoothie_175:
(Start: 20 @87741 has 10 MA's),

Gene: Squash_95 Start: 57828, Stop: 57601, Start Num: 19
Candidate Starts for Squash_95:
(1, 58293), (3, 58173), (4, 58152), (13, 57867), (Start: 19 @57828 has 35 MA's), (25, 57780),

Gene: Statler_96 Start: 57852, Stop: 57625, Start Num: 19
Candidate Starts for Statler_96:
(Start: 19 @57852 has 35 MA's), (25, 57804), (34, 57714), (36, 57693),

Gene: StrawberryJamm_99 Start: 57390, Stop: 57163, Start Num: 19
Candidate Starts for StrawberryJamm_99:
(Start: 19 @57390 has 35 MA's), (24, 57348), (25, 57342), (34, 57252),

Gene: Switzerland_96 Start: 49791, Stop: 49594, Start Num: 18
Candidate Starts for Switzerland_96:
(Start: 18 @49791 has 14 MA's), (33, 49662),

Gene: Tailonex_73 Start: 46544, Stop: 46347, Start Num: 21
Candidate Starts for Tailonex_73:
(21, 46544), (35, 46412), (39, 46355),

Gene: Teehee_94 Start: 58069, Stop: 57842, Start Num: 19
Candidate Starts for Teehee_94:
(Start: 19 @58069 has 35 MA's), (24, 58027), (25, 58021), (34, 57931),

Gene: Toniann_174 Start: 87186, Stop: 86971, Start Num: 20
Candidate Starts for Toniann_174:
(Start: 20 @87186 has 10 MA's),

Gene: Viceroy_92 Start: 57236, Stop: 57009, Start Num: 19
Candidate Starts for Viceroy_92:
(Start: 19 @57236 has 35 MA's), (25, 57188), (34, 57098),

Gene: Wayne3_95 Start: 58039, Stop: 57812, Start Num: 19
Candidate Starts for Wayne3_95:
(Start: 19 @58039 has 35 MA's), (24, 57997), (25, 57991), (34, 57901),

Gene: Wheelie_93 Start: 57360, Stop: 57133, Start Num: 19
Candidate Starts for Wheelie_93:
(Start: 19 @57360 has 35 MA's), (24, 57318), (25, 57312), (34, 57222),

Gene: WilliamBoone_179 Start: 86680, Stop: 86468, Start Num: 20
Candidate Starts for WilliamBoone_179:
(Start: 20 @86680 has 10 MA's),

Gene: Wrackline_46 Start: 25700, Stop: 25458, Start Num: 17
Candidate Starts for Wrackline_46:
(8, 25787), (Start: 17 @25700 has 2 MA's), (26, 25619), (27, 25613), (37, 25499), (39, 25469),

Gene: Zagie_95 Start: 57881, Stop: 57654, Start Num: 19
Candidate Starts for Zagie_95:
(Start: 19 @57881 has 35 MA's), (25, 57833), (34, 57743),

Gene: Zhafia_96 Start: 57915, Stop: 57688, Start Num: 19
Candidate Starts for Zhafia_96:
(Start: 19 @57915 has 35 MA's), (25, 57867), (34, 57777),