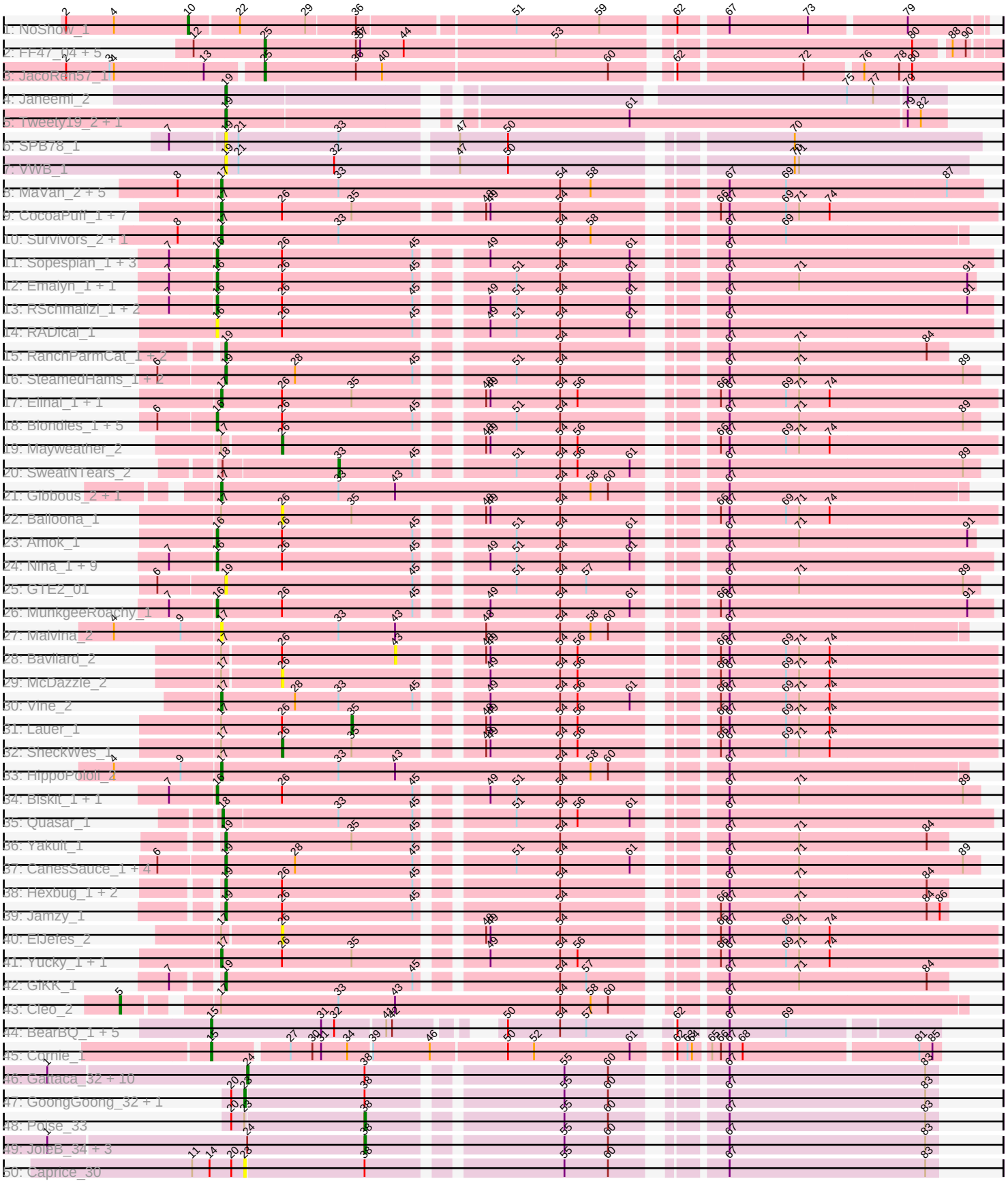
Pham 304820


1: NoSnow_1
2: FF47_64 + 5
3: JacoRan57_1
4: Janeemi_2
5: Tweety19_2 + 1
6: SPB78_1
7: VWB_1
8: MaVan_2 + 5
9: CocoaPuff_1 + 7
10: Survivors_2 + 1
11: Sopesplan_1 + 3
12: Emalyn_1 + 1
13: RSchmalzl_1 + 2
14: RADical_1
15: RanchParmCat_1 + 2
16: SteamedHams_1 + 2
17: Elinal_1 + 1
18: Blondies_1 + 5
19: Mayweather_2
20: SweatNTears_2
21: Gibbous_2 + 1
22: Balloona_1
23: Amok_1
24: Nina_1 + 9
25: GTE2_01
26: MunkgeeRoachy_1
27: Malvina_2
28: Bavilard_2
29: McDazzle_2
30: Vine_2
31: Lauer_1
32: SheckWes_1
33: HippoPolo_2
34: Biskit_1 + 1
35: Quasar_1
36: Yakult_1
37: CanesSauce_1 + 4
38: Hexbug_1 + 2
39: Jamzy_1
40: ElJefes_2
41: Yucky_1 + 1
42: GIKK_1
43: Cleo_2
44: BearBQ_1 + 5
45: Connie_1
46: Gattaca_32 + 10
47: GoongGoong_32 + 1
48: Poise_33
49: JollBB_34 + 3
50: Caprice_30

Pham 304820

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 304820 Report

This analysis was run 06/08/26 on database version 649.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 304820 has 123 members, 28 are drafts.

Phages represented in each track:
• Track 1 : NoShow_1
• Track 2 : FF47_04, Muddy_4, LongHai_5, 8UZL_4, Salvus_5, Maco6_2
• Track 3 : JacoRen57_1
• Track 4 : Janeemi_2
• Track 5 : Tweety19_2, Snek_2
• Track 6 : SPB78_1
• Track 7 : VWB_1
• Track 8 : MaVan_2, Wallaby_2, Zareef_2, Wolfwood_2, Azira_2, Nibbles_2
• Track 9 : CocoaPuff_1, Tarnish_1, BigChungus_1, Feastonyeet_1, SummitAcademy_1, Pons_1, CherryonLim_1, MAnor_1
• Track 10 : Survivors_2, Fribs8_2
• Track 11 : Sopespian_1, PsychoKiller_1, Burnsey_1, Eliott_1
• Track 12 : Emalyn_1, AikoCarson_1
• Track 13 : RSchmailzl_1, RedBaron_1, Carsonalex_1
• Track 14 : RADical_1
• Track 15 : RanchParmCat_1, Button_1, Margaret_1
• Track 16 : SteamedHams_1, AndPeggy_1, BillDoor_1
• Track 17 : Elinal_1, KayGee_1
• Track 18 : Blondies_1, Horseradish_1, Troje_1, MScarn_1, Buttrmlkdreams_1, Yummy_1
• Track 19 : Mayweather_2
• Track 20 : SweatNTears_2
• Track 21 : Gibbous_2, Dre3_2
• Track 22 : Balloona_1
• Track 23 : Amok_1
• Track 24 : Nina_1, Cozz_1, ChickenTender_1, Agatha_1, Bubble_1, Typhonomachy_1, GoldHunter_1, Socotra_1, Starburst_1, Axym_1
• Track 25 : GTE2_01
• Track 26 : MunkgeeRoachy_1
• Track 27 : Malvina_2
• Track 28 : Bavilard_2
• Track 29 : McDazzle_2
• Track 30 : Vine_2

• Track 31 : Lauer_1
• Track 32 : SheckWes_1
• Track 33 : HippoPololi_2
• Track 34 : Biskit_1, SketchMex_1
• Track 35 : Quasar_1
• Track 36 : Yakult_1
• Track 37 : CanesSauce_1, Tolls_1, CaramelLatte_1, ChocoMunchkin_1, Yarn_1
• Track 38 : Hexbug_1, Orla_1, Nodigi_1
• Track 39 : Jamzy_1
• Track 40 : ElJefes_2
• Track 41 : Yucky_1, PotPie_1
• Track 42 : GiKK_1
• Track 43 : Cleo_2
• Track 44 : BearBQ_1, MortyNRick_1, Kuwabara_1, Crater_1, Apricot_1, Birdsong_1
• Track 45 : Cornie_1
• Track 46 : Gattaca_32, RedRaider77_33, Corazon_31, Huphlepuff_35, Tesla_32, Pringar_33, Lilbit_32, LittleLaf_33, VasuNzinga_33, FeliMaine_35, Clarkson_34
• Track 47 : GoongGoong_32, Raela_33
• Track 48 : Poise_33
• Track 49 : JoieB_34, Marvin_31, MosMoris_31, Beelzebub_37
• Track 50 : Caprice_30
• Track 51 : Blackbeetle_33

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 22 of the 95 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Azira_2, BigChungus_1, CherryonLim_1, CocoaPuff_1, Dre3_2, Elinal_1, Feastonyeet_1, Fribs8_2, Gibbous_2, HippoPololi_2, KayGee_1, MAnor_1, MaVan_2, Malvina_2, Nibbles_2, Pons_1, PotPie_1, SummitAcademy_1, Survivors_2, Tarnish_1, Vine_2, Wallaby_2, Wolfwood_2, Yucky_1, Zareef_2,

Genes that have the "Most Annotated" start but do not call it:
• Balloona_1, Bavilard_2, Cleo_2, ElJefes_2, Lauer_1, Mayweather_2, McDazzle_2, SheckWes_1,

Genes that do not have the "Most Annotated" start:
• 8UZL_4, Agatha_1, AikoCarson_1, Amok_1, AndPeggy_1, Apricot_1, Axym_1, BearBQ_1, Beelzebub_37, BillDoor_1, Birdsong_1, Biskit_1, Blackbeetle_33, Blondies_1, Bubble_1, Burnsey_1, Button_1, Buttrmlkdreams_1, CanesSauce_1, Caprice_30, CaramelLatte_1, Carsonalex_1, ChickenTender_1, ChocoMunchkin_1, Clarkson_34, Corazon_31, Cornie_1, Cozz_1, Crater_1, Eliott_1, Emalyn_1, FF47_04, FeliMaine_35, GTE2_01, Gattaca_32, GiKK_1, GoldHunter_1, GoongGoong_32, Hexbug_1, Horseradish_1, Huphlepuff_35, JacoRen57_1, Jamzy_1, Janeemi_2, JoieB_34, Kuwabara_1, Lilbit_32, LittleLaf_33, LongHai_5, MScarn_1, Maco6_2, Margaret_1, Marvin_31, MortyNRick_1, MosMoris_31, Muddy_4, MunkgeeRoachy_1, Nina_1, NoShow_1, Nodigi_1, Orla_1, Poise_33, Pringar_33, PsychoKiller_1, Quasar_1, RADical_1, RSchmailzl_1, Raela_33,

RanchParmCat_1, RedBaron_1, RedRaider77_33, SPB78_1, Salvus_5, SketchMex_1, Snek_2, Socotra_1, Sopespian_1, Starburst_1, SteamedHams_1, SweatNTears_2, Tesla_32, Tolls_1, Troje_1, Tweety19_2, Typhonomachy_1, VWB_1, VasuNzinga_33, Yakult_1, Yarn_1, Yummy_1,

Summary by start number:

Start 5:
• Found in 1 of 123 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 95
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cleo_2 (CT),

Start 10:
• Found in 1 of 123 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 95
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NoShow_1 (AB),

Start 15:
• Found in 7 of 123 (5.7%) of genes in pham
• Manual Annotations of this start: 7 of 95
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apricot_1 (DN3), BearBQ_1 (DN), Birdsong_1 (DN), Cornie_1 (F5), Crater_1 (DN3), Kuwabara_1 (DN4), MortyNRick_1 (DN),

Start 16:
• Found in 30 of 123 (24.4%) of genes in pham
• Manual Annotations of this start: 20 of 95
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Agatha_1 (CT), AikoCarson_1 (CT), Amok_1 (CT), Axym_1 (CT), Biskit_1 (CT), Blondies_1 (CT), Bubble_1 (CT), Burnsey_1 (CT), Buttrmlkdreams_1 (CT), Carsonalex_1 (CT), ChickenTender_1 (CT), Cozz_1 (CT), Eliott_1 (CT), Emalyn_1 (CT), GoldHunter_1 (CT), Horseradish_1 (CT), MScarn_1 (CT), MunkgeeRoachy_1 (CT), Nina_1 (CT), PsychoKiller_1 (CT), RADical_1 (CT), RSchmailzl_1 (CT), RedBaron_1 (CT), SketchMex_1 (CT), Socotra_1 (CT), Sopespian_1 (CT), Starburst_1 (CT), Troje_1 (CT), Typhonomachy_1 (CT), Yummy_1 (CT),

Start 17:
• Found in 33 of 123 (26.8%) of genes in pham
• Manual Annotations of this start: 22 of 95
• Called 75.8% of time when present
• Phage (with cluster) where this start called: Azira_2 (CT), BigChungus_1 (CT), CherryonLim_1 (CT), CocoaPuff_1 (CT), Dre3_2 (CT), Elinal_1 (CT), Feastonyeet_1 (CT), Fribs8_2 (CT), Gibbous_2 (CT), HippoPololi_2 (CT), KayGee_1 (CT), MAnor_1 (CT), MaVan_2 (CT), Malvina_2 (CT), Nibbles_2 (CT), Pons_1 (CT), PotPie_1 (CT), SummitAcademy_1 (CT), Survivors_2 (CT), Tarnish_1 (CT), Vine_2 (CT), Wallaby_2 (CT), Wolfwood_2 (CT), Yucky_1 (CT), Zareef_2 (CT),

Start 18:
• Found in 2 of 123 (1.6%) of genes in pham

• Manual Annotations of this start: 1 of 95
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Quasar_1 (CT),

Start 19:
• Found in 23 of 123 (18.7%) of genes in pham
• Manual Annotations of this start: 17 of 95
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AndPeggy_1 (CT), BillDoor_1 (CT), Button_1 (CT), CanesSauce_1 (CT), CaramelLatte_1 (CT), ChocoMunchkin_1 (CT), GTE2_01 (CT), GiKK_1 (CT), Hexbug_1 (CT), Jamzy_1 (CT), Janeemi_2 (AZ1), Margaret_1 (CT), Nodigi_1 (CT), Orla_1 (CT), RanchParmCat_1 (CT), SPB78_1 (BA), Snek_2 (AZ3), SteamedHams_1 (CT), Tolls_1 (CT), Tweety19_2 (AZ3), VWB_1 (BA), Yakult_1 (CT), Yarn_1 (CT),

Start 20:
• Found in 5 of 123 (4.1%) of genes in pham
• Manual Annotations of this start: 1 of 95
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Blackbeetle_33 (S),

Start 23:
• Found in 5 of 123 (4.1%) of genes in pham
• Manual Annotations of this start: 2 of 95
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Caprice_30 (S), GoongGoong_32 (S), Raela_33 (S),

Start 24:
• Found in 15 of 123 (12.2%) of genes in pham
• Manual Annotations of this start: 11 of 95
• Called 73.3% of time when present
• Phage (with cluster) where this start called: Clarkson_34 (S), Corazon_31 (S), FeliMaine_35 (S), Gattaca_32 (S), Huphlepuff_35 (S), Lilbit_32 (S), LittleLaf_33 (S), Pringar_33 (S), RedRaider77_33 (S), Tesla_32 (S), VasuNzinga_33 (S),

Start 25:
• Found in 7 of 123 (5.7%) of genes in pham
• Manual Annotations of this start: 3 of 95
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 8UZL_4 (AB), FF47_04 (AB), JacoRen57_1 (AB), LongHai_5 (AB), Maco6_2 (AB), Muddy_4 (AB), Salvus_5 (AB),

Start 26:
• Found in 53 of 123 (43.1%) of genes in pham
• Manual Annotations of this start: 2 of 95
• Called 9.4% of time when present
• Phage (with cluster) where this start called: Balloona_1 (CT), ElJefes_2 (CT), Mayweather_2 (CT), McDazzle_2 (CT), SheckWes_1 (CT),

Start 33:
• Found in 17 of 123 (13.8%) of genes in pham
• Manual Annotations of this start: 1 of 95

• Called 5.9% of time when present
• Phage (with cluster) where this start called: SweatNTears_2 (CT),

Start 35:
• Found in 16 of 123 (13.0%) of genes in pham
• Manual Annotations of this start: 1 of 95
• Called 6.2% of time when present
• Phage (with cluster) where this start called: Lauer_1 (CT),

Start 38:
• Found in 20 of 123 (16.3%) of genes in pham
• Manual Annotations of this start: 5 of 95
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Beelzebub_37 (S), JoieB_34 (S), Marvin_31 (S), MosMoris_31 (S), Poise_33 (S),

Start 43:
• Found in 6 of 123 (4.9%) of genes in pham
• No Manual Annotations of this start.
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Bavilard_2 (CT),

Summary by clusters:

There are 10 clusters represented in this pham: DN, AB, BA, F5, DN4, S, DN3, AZ1, AZ3, CT,

Info for manual annotations of cluster AB:
•Start number 10 was manually annotated 1 time for cluster AB.
•Start number 25 was manually annotated 3 times for cluster AB.

Info for manual annotations of cluster AZ1:
•Start number 19 was manually annotated 1 time for cluster AZ1.

Info for manual annotations of cluster AZ3:
•Start number 19 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster CT:
•Start number 5 was manually annotated 1 time for cluster CT.
•Start number 16 was manually annotated 20 times for cluster CT.
•Start number 17 was manually annotated 22 times for cluster CT.
•Start number 18 was manually annotated 1 time for cluster CT.
•Start number 19 was manually annotated 14 times for cluster CT.
•Start number 26 was manually annotated 2 times for cluster CT.
•Start number 33 was manually annotated 1 time for cluster CT.
•Start number 35 was manually annotated 1 time for cluster CT.

Info for manual annotations of cluster DN:
•Start number 15 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN3:
•Start number 15 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:
•Start number 15 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster F5:
•Start number 15 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster S:
•Start number 20 was manually annotated 1 time for cluster S.
•Start number 23 was manually annotated 2 times for cluster S.
•Start number 24 was manually annotated 11 times for cluster S.
•Start number 38 was manually annotated 5 times for cluster S.

Gene Information:

Gene: 8UZL_4 Start: 1322, Stop: 1795, Start Num: 25
Candidate Starts for 8UZL_4:
(12, 1274), (Start: 25 @1322 has 3 MA's), (36, 1385), (37, 1388), (44, 1418), (53, 1520), (80, 1745), (88, 1766), (90, 1775),

Gene: Agatha_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Agatha_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364),

Gene: AikoCarson_1 Start: 52, Stop: 531, Start Num: 16
Candidate Starts for AikoCarson_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (51, 241), (54, 271), (61, 319), (67, 364), (71, 412), (91, 526),

Gene: Amok_1 Start: 53, Stop: 532, Start Num: 16
Candidate Starts for Amok_1:
(Start: 16 @53 has 20 MA's), (Start: 26 @98 has 2 MA's), (45, 188), (51, 242), (54, 272), (61, 320), (67, 365), (71, 413), (91, 527),

Gene: AndPeggy_1 Start: 59, Stop: 535, Start Num: 19
Candidate Starts for AndPeggy_1:
(6, 14), (Start: 19 @59 has 17 MA's), (28, 107), (45, 188), (51, 242), (54, 272), (67, 365), (71, 413), (89, 524),

Gene: Apricot_1 Start: 50, Stop: 484, Start Num: 15
Candidate Starts for Apricot_1:
(Start: 15 @50 has 7 MA's), (31, 125), (32, 134), (41, 167), (42, 170), (50, 218), (54, 254), (57, 272), (62, 317), (67, 347), (69, 386),

Gene: Axym_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Axym_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364),

Gene: Azira_2 Start: 425, Stop: 922, Start Num: 17

Candidate Starts for Azira_2:
(8, 398), (Start: 17 @425 has 22 MA's), (Start: 33 @506 has 1 MA's), (54, 659), (58, 680), (67, 752), (69, 791), (87, 899),

Gene: Balloona_1 Start: 98, Stop: 547, Start Num: 26
Candidate Starts for Balloona_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: Bavilard_2 Start: 592, Stop: 963, Start Num: 43
Candidate Starts for Bavilard_2:
(Start: 17 @475 has 22 MA's), (Start: 26 @514 has 2 MA's), (43, 592), (48, 637), (49, 640), (54, 688), (56, 700), (66, 775), (67, 781), (69, 820), (71, 829), (74, 850),

Gene: BearBQ_1 Start: 50, Stop: 484, Start Num: 15
Candidate Starts for BearBQ_1:
(Start: 15 @50 has 7 MA's), (31, 125), (32, 134), (41, 167), (42, 170), (50, 218), (54, 254), (57, 272), (62, 317), (67, 347), (69, 386),

Gene: Beelzebub_37 Start: 10803, Stop: 11156, Start Num: 38
Candidate Starts for Beelzebub_37:
(1, 10587), (Start: 24 @10722 has 11 MA's), (Start: 38 @10803 has 5 MA's), (55, 10923), (60, 10953), (67, 11013), (83, 11148),

Gene: BigChungus_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for BigChungus_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: BillDoor_1 Start: 59, Stop: 535, Start Num: 19
Candidate Starts for BillDoor_1:
(6, 14), (Start: 19 @59 has 17 MA's), (28, 107), (45, 188), (51, 242), (54, 272), (67, 365), (71, 413), (89, 524),

Gene: Birdsong_1 Start: 50, Stop: 484, Start Num: 15
Candidate Starts for Birdsong_1:
(Start: 15 @50 has 7 MA's), (31, 125), (32, 134), (41, 167), (42, 170), (50, 218), (54, 254), (57, 272), (62, 317), (67, 347), (69, 386),

Gene: Biskit_1 Start: 52, Stop: 534, Start Num: 16
Candidate Starts for Biskit_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (67, 364), (71, 412), (89, 523),

Gene: Blackbeetle_33 Start: 9732, Stop: 10175, Start Num: 20
Candidate Starts for Blackbeetle_33:
(Start: 20 @9732 has 1 MA's), (Start: 23 @9741 has 2 MA's), (Start: 38 @9822 has 5 MA's), (55, 9942), (60, 9972), (67, 10032), (83, 10167),

Gene: Blondies_1 Start: 53, Stop: 535, Start Num: 16
Candidate Starts for Blondies_1:
(6, 14), (Start: 16 @53 has 20 MA's), (Start: 26 @98 has 2 MA's), (45, 188), (51, 242), (54, 272), (67, 365), (71, 413), (89, 524),

Gene: Bubble_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Bubble_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364),

Gene: Burnsey_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Burnsey_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (54, 271), (61, 319), (67, 364),

Gene: Button_1 Start: 50, Stop: 505, Start Num: 19
Candidate Starts for Button_1:
(Start: 19 @50 has 17 MA's), (54, 263), (67, 356), (71, 404), (84, 491),

Gene: Buttrmlkdreams_1 Start: 53, Stop: 535, Start Num: 16
Candidate Starts for Buttrmlkdreams_1:
(6, 14), (Start: 16 @53 has 20 MA's), (Start: 26 @98 has 2 MA's), (45, 188), (51, 242), (54, 272), (67, 365), (71, 413), (89, 524),

Gene: CanesSauce_1 Start: 59, Stop: 535, Start Num: 19
Candidate Starts for CanesSauce_1:
(6, 14), (Start: 19 @59 has 17 MA's), (28, 107), (45, 188), (51, 242), (54, 272), (61, 320), (67, 365), (71, 413), (89, 524),

Gene: Caprice_30 Start: 9811, Stop: 10245, Start Num: 23
Candidate Starts for Caprice_30:
(11, 9775), (14, 9787), (Start: 20 @9802 has 1 MA's), (Start: 23 @9811 has 2 MA's), (Start: 38 @9892 has 5 MA's), (55, 10012), (60, 10042), (67, 10102), (83, 10237),

Gene: CaramelLatte_1 Start: 59, Stop: 535, Start Num: 19
Candidate Starts for CaramelLatte_1:
(6, 14), (Start: 19 @59 has 17 MA's), (28, 107), (45, 188), (51, 242), (54, 272), (61, 320), (67, 365), (71, 413), (89, 524),

Gene: Carsonalex_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Carsonalex_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364), (91, 526),

Gene: CherryonLim_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for CherryonLim_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: ChickenTender_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for ChickenTender_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364),

Gene: ChocoMunchkin_1 Start: 59, Stop: 535, Start Num: 19
Candidate Starts for ChocoMunchkin_1:

(6, 14), (Start: 19 @59 has 17 MA's), (28, 107), (45, 188), (51, 242), (54, 272), (61, 320), (67, 365), (71, 413), (89, 524),

Gene: Clarkson_34 Start: 10423, Stop: 10857, Start Num: 24
Candidate Starts for Clarkson_34:
(1, 10288), (Start: 24 @10423 has 11 MA's), (Start: 38 @10504 has 5 MA's), (55, 10624), (60, 10654), (67, 10714), (83, 10849),

Gene: Cleo_2 Start: 447, Stop: 983, Start Num: 5
Candidate Starts for Cleo_2:
(Start: 5 @447 has 1 MA's), (Start: 17 @498 has 22 MA's), (Start: 33 @579 has 1 MA's), (43, 618), (54, 732), (58, 753), (60, 765), (67, 825),

Gene: CocoaPuff_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for CocoaPuff_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: Corazon_31 Start: 10376, Stop: 10810, Start Num: 24
Candidate Starts for Corazon_31:
(1, 10241), (Start: 24 @10376 has 11 MA's), (Start: 38 @10457 has 5 MA's), (55, 10577), (60, 10607), (67, 10667), (83, 10802),

Gene: Cornie_1 Start: 85, Stop: 549, Start Num: 15
Candidate Starts for Cornie_1:
(Start: 15 @85 has 7 MA's), (27, 133), (30, 148), (31, 154), (34, 172), (39, 187), (46, 226), (50, 277), (52, 295), (61, 361), (62, 379), (63, 385), (64, 388), (65, 397), (66, 403), (67, 409), (68, 418), (81, 535), (85, 544),

Gene: Cozz_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Cozz_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364),

Gene: Crater_1 Start: 50, Stop: 484, Start Num: 15
Candidate Starts for Crater_1:
(Start: 15 @50 has 7 MA's), (31, 125), (32, 134), (41, 167), (42, 170), (50, 218), (54, 254), (57, 272), (62, 317), (67, 347), (69, 386),

Gene: Dre3_2 Start: 442, Stop: 927, Start Num: 17
Candidate Starts for Dre3_2:
(Start: 17 @442 has 22 MA's), (Start: 33 @523 has 1 MA's), (43, 562), (54, 676), (58, 697), (60, 709), (67, 769),

Gene: ElJefes_2 Start: 514, Stop: 963, Start Num: 26
Candidate Starts for ElJefes_2:
(Start: 17 @475 has 22 MA's), (Start: 26 @514 has 2 MA's), (48, 637), (49, 640), (54, 688), (66, 775), (67, 781), (69, 820), (71, 829), (74, 850),

Gene: Elinal_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for Elinal_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (56, 284), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: Eliott_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Eliott_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (54, 271), (61, 319), (67, 364),

Gene: Emalyn_1 Start: 52, Stop: 531, Start Num: 16
Candidate Starts for Emalyn_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (51, 241), (54, 271), (61, 319), (67, 364), (71, 412), (91, 526),

Gene: FF47_04 Start: 1302, Stop: 1775, Start Num: 25
Candidate Starts for FF47_04:
(12, 1254), (Start: 25 @1302 has 3 MA's), (36, 1365), (37, 1368), (44, 1398), (53, 1500), (80, 1725), (88, 1746), (90, 1755),

Gene: Feastonyeet_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for Feastonyeet_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: FeliMaine_35 Start: 10424, Stop: 10858, Start Num: 24
Candidate Starts for FeliMaine_35:
(1, 10289), (Start: 24 @10424 has 11 MA's), (Start: 38 @10505 has 5 MA's), (55, 10625), (60, 10655), (67, 10715), (83, 10850),

Gene: Fribs8_2 Start: 426, Stop: 911, Start Num: 17
Candidate Starts for Fribs8_2:
(8, 399), (Start: 17 @426 has 22 MA's), (Start: 33 @507 has 1 MA's), (54, 660), (58, 681), (67, 753), (69, 792),

Gene: GTE2_01 Start: 59, Stop: 535, Start Num: 19
Candidate Starts for GTE2_01:
(6, 14), (Start: 19 @59 has 17 MA's), (45, 188), (51, 242), (54, 272), (57, 290), (67, 365), (71, 413), (89, 524),

Gene: Gattaca_32 Start: 9603, Stop: 10037, Start Num: 24
Candidate Starts for Gattaca_32:
(1, 9468), (Start: 24 @9603 has 11 MA's), (Start: 38 @9684 has 5 MA's), (55, 9804), (60, 9834), (67, 9894), (83, 10029),

Gene: GiKK_1 Start: 49, Stop: 504, Start Num: 19
Candidate Starts for GiKK_1:
(7, 22), (Start: 19 @49 has 17 MA's), (45, 178), (54, 262), (57, 280), (67, 355), (71, 403), (84, 490),

Gene: Gibbous_2 Start: 442, Stop: 927, Start Num: 17
Candidate Starts for Gibbous_2:
(Start: 17 @442 has 22 MA's), (Start: 33 @523 has 1 MA's), (43, 562), (54, 676), (58, 697), (60, 709), (67, 769),

Gene: GoldHunter_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for GoldHunter_1:

(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364),

Gene: GoongGoong_32 Start: 9643, Stop: 10077, Start Num: 23
Candidate Starts for GoongGoong_32:
(Start: 20 @9634 has 1 MA's), (Start: 23 @9643 has 2 MA's), (Start: 38 @9724 has 5 MA's), (55, 9844), (60, 9874), (67, 9934), (83, 10069),

Gene: Hexbug_1 Start: 50, Stop: 505, Start Num: 19
Candidate Starts for Hexbug_1:
(Start: 19 @50 has 17 MA's), (Start: 26 @89 has 2 MA's), (45, 179), (54, 263), (67, 356), (71, 404), (84, 491),

Gene: HippoPololi_2 Start: 449, Stop: 934, Start Num: 17
Candidate Starts for HippoPololi_2:
(4, 380), (9, 425), (Start: 17 @449 has 22 MA's), (Start: 33 @530 has 1 MA's), (43, 569), (54, 683), (58, 704), (60, 716), (67, 776),

Gene: Horseradish_1 Start: 53, Stop: 535, Start Num: 16
Candidate Starts for Horseradish_1:
(6, 14), (Start: 16 @53 has 20 MA's), (Start: 26 @98 has 2 MA's), (45, 188), (51, 242), (54, 272), (67, 365), (71, 413), (89, 524),

Gene: Huphlepuff_35 Start: 10228, Stop: 10662, Start Num: 24
Candidate Starts for Huphlepuff_35:
(1, 10093), (Start: 24 @10228 has 11 MA's), (Start: 38 @10309 has 5 MA's), (55, 10429), (60, 10459), (67, 10519), (83, 10654),

Gene: JacoRen57_1 Start: 190, Stop: 669, Start Num: 25
Candidate Starts for JacoRen57_1:
(2, 61), (3, 91), (4, 94), (13, 154), (Start: 25 @190 has 3 MA's), (36, 253), (40, 271), (60, 424), (62, 457), (72, 538), (76, 574), (78, 598), (80, 607),

Gene: Jamzy_1 Start: 49, Stop: 504, Start Num: 19
Candidate Starts for Jamzy_1:
(Start: 19 @49 has 17 MA's), (Start: 26 @88 has 2 MA's), (45, 178), (54, 262), (66, 349), (67, 355), (71, 403), (84, 490), (86, 499),

Gene: Janeemi_2 Start: 1168, Stop: 1620, Start Num: 19
Candidate Starts for Janeemi_2:
(Start: 19 @1168 has 17 MA's), (75, 1555), (77, 1573), (79, 1594),

Gene: JoieB_34 Start: 10528, Stop: 10881, Start Num: 38
Candidate Starts for JoieB_34:
(1, 10312), (Start: 24 @10447 has 11 MA's), (Start: 38 @10528 has 5 MA's), (55, 10648), (60, 10678), (67, 10738), (83, 10873),

Gene: KayGee_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for KayGee_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (56, 284), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: Kuwabara_1 Start: 50, Stop: 484, Start Num: 15

Candidate Starts for Kuwabara_1:
(Start: 15 @50 has 7 MA's), (31, 125), (32, 134), (41, 167), (42, 170), (50, 218), (54, 254), (57, 272), (62, 317), (67, 347), (69, 386),

Gene: Lauer_1 Start: 146, Stop: 547, Start Num: 35
Candidate Starts for Lauer_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (56, 284), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: Lilbit_32 Start: 10424, Stop: 10858, Start Num: 24
Candidate Starts for Lilbit_32:
(1, 10289), (Start: 24 @10424 has 11 MA's), (Start: 38 @10505 has 5 MA's), (55, 10625), (60, 10655), (67, 10715), (83, 10850),

Gene: LittleLaf_33 Start: 10153, Stop: 10587, Start Num: 24
Candidate Starts for LittleLaf_33:
(1, 10018), (Start: 24 @10153 has 11 MA's), (Start: 38 @10234 has 5 MA's), (55, 10354), (60, 10384), (67, 10444), (83, 10579),

Gene: LongHai_5 Start: 1624, Stop: 2100, Start Num: 25
Candidate Starts for LongHai_5:
(12, 1576), (Start: 25 @1624 has 3 MA's), (36, 1687), (37, 1690), (44, 1720), (53, 1822), (80, 2047), (88, 2068), (90, 2077),

Gene: MAnor_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for MAnor_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: MScarn_1 Start: 53, Stop: 535, Start Num: 16
Candidate Starts for MScarn_1:
(6, 14), (Start: 16 @53 has 20 MA's), (Start: 26 @98 has 2 MA's), (45, 188), (51, 242), (54, 272), (67, 365), (71, 413), (89, 524),

Gene: MaVan_2 Start: 426, Stop: 923, Start Num: 17
Candidate Starts for MaVan_2:
(8, 399), (Start: 17 @426 has 22 MA's), (Start: 33 @507 has 1 MA's), (54, 660), (58, 681), (67, 753), (69, 792), (87, 900),

Gene: Maco6_2 Start: 581, Stop: 1054, Start Num: 25
Candidate Starts for Maco6_2:
(12, 533), (Start: 25 @581 has 3 MA's), (36, 644), (37, 647), (44, 677), (53, 779), (80, 1004), (88, 1025), (90, 1034),

Gene: Malvina_2 Start: 449, Stop: 934, Start Num: 17
Candidate Starts for Malvina_2:
(4, 380), (9, 425), (Start: 17 @449 has 22 MA's), (Start: 33 @530 has 1 MA's), (43, 569), (48, 632), (54, 683), (58, 704), (60, 716), (67, 776),

Gene: Margaret_1 Start: 49, Stop: 504, Start Num: 19
Candidate Starts for Margaret_1:
(Start: 19 @49 has 17 MA's), (54, 262), (67, 355), (71, 403), (84, 490),

Gene: Marvin_31 Start: 10504, Stop: 10857, Start Num: 38
Candidate Starts for Marvin_31:
(1, 10288), (Start: 24 @10423 has 11 MA's), (Start: 38 @10504 has 5 MA's), (55, 10624), (60, 10654), (67, 10714), (83, 10849),

Gene: Mayweather_2 Start: 513, Stop: 962, Start Num: 26
Candidate Starts for Mayweather_2:
(Start: 17 @474 has 22 MA's), (Start: 26 @513 has 2 MA's), (48, 636), (49, 639), (54, 687), (56, 699), (66, 774), (67, 780), (69, 819), (71, 828), (74, 849),

Gene: McDazzle_2 Start: 514, Stop: 963, Start Num: 26
Candidate Starts for McDazzle_2:
(Start: 17 @475 has 22 MA's), (Start: 26 @514 has 2 MA's), (49, 640), (54, 688), (56, 700), (66, 775), (67, 781), (69, 820), (71, 829), (74, 850),

Gene: MortyNRick_1 Start: 50, Stop: 484, Start Num: 15
Candidate Starts for MortyNRick_1:
(Start: 15 @50 has 7 MA's), (31, 125), (32, 134), (41, 167), (42, 170), (50, 218), (54, 254), (57, 272), (62, 317), (67, 347), (69, 386),

Gene: MosMoris_31 Start: 9684, Stop: 10037, Start Num: 38
Candidate Starts for MosMoris_31:
(1, 9468), (Start: 24 @9603 has 11 MA's), (Start: 38 @9684 has 5 MA's), (55, 9804), (60, 9834), (67, 9894), (83, 10029),

Gene: Muddy_4 Start: 1535, Stop: 2008, Start Num: 25
Candidate Starts for Muddy_4:
(12, 1487), (Start: 25 @1535 has 3 MA's), (36, 1598), (37, 1601), (44, 1631), (53, 1733), (80, 1958), (88, 1979), (90, 1988),

Gene: MunkgeeRoachy_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for MunkgeeRoachy_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (54, 271), (61, 319), (66, 358), (67, 364), (91, 526),

Gene: Nibbles_2 Start: 426, Stop: 923, Start Num: 17
Candidate Starts for Nibbles_2:
(8, 399), (Start: 17 @426 has 22 MA's), (Start: 33 @507 has 1 MA's), (54, 660), (58, 681), (67, 753), (69, 792), (87, 900),

Gene: Nina_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Nina_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364),

Gene: NoShow_1 Start: 166, Stop: 675, Start Num: 10
Candidate Starts for NoShow_1:
(2, 82), (4, 115), (Start: 10 @166 has 1 MA's), (22, 199), (29, 244), (36, 277), (51, 379), (59, 436), (62, 478), (67, 508), (73, 562), (79, 625),

Gene: Nodigi_1 Start: 50, Stop: 505, Start Num: 19
Candidate Starts for Nodigi_1:

(Start: 19 @50 has 17 MA's), (Start: 26 @89 has 2 MA's), (45, 179), (54, 263), (67, 356), (71, 404), (84, 491),

Gene: Orla_1 Start: 49, Stop: 504, Start Num: 19
Candidate Starts for Orla_1:
(Start: 19 @49 has 17 MA's), (Start: 26 @88 has 2 MA's), (45, 178), (54, 262), (67, 355), (71, 403), (84, 490),

Gene: Poise_33 Start: 9822, Stop: 10175, Start Num: 38
Candidate Starts for Poise_33:
(Start: 20 @9732 has 1 MA's), (Start: 23 @9741 has 2 MA's), (Start: 38 @9822 has 5 MA's), (55, 9942), (60, 9972), (67, 10032), (83, 10167),

Gene: Pons_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for Pons_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: PotPie_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for PotPie_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (49, 224), (54, 272), (56, 284), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: Pringar_33 Start: 10053, Stop: 10487, Start Num: 24
Candidate Starts for Pringar_33:
(1, 9918), (Start: 24 @10053 has 11 MA's), (Start: 38 @10134 has 5 MA's), (55, 10254), (60, 10284), (67, 10344), (83, 10479),

Gene: PsychoKiller_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for PsychoKiller_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (54, 271), (61, 319), (67, 364),

Gene: Quasar_1 Start: 679, Stop: 1164, Start Num: 18
Candidate Starts for Quasar_1:
(Start: 18 @679 has 1 MA's), (Start: 33 @757 has 1 MA's), (45, 808), (51, 862), (54, 892), (56, 904), (61, 940), (67, 985),

Gene: RADical_1 Start: 53, Stop: 544, Start Num: 16
Candidate Starts for RADical_1:
(Start: 16 @53 has 20 MA's), (Start: 26 @98 has 2 MA's), (45, 188), (49, 224), (51, 242), (54, 272), (61, 320), (67, 365),

Gene: RSchmailzl_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for RSchmailzl_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364), (91, 526),

Gene: Raela_33 Start: 10296, Stop: 10730, Start Num: 23
Candidate Starts for Raela_33:
(Start: 20 @10287 has 1 MA's), (Start: 23 @10296 has 2 MA's), (Start: 38 @10377 has 5 MA's), (55, 10497), (60, 10527), (67, 10587), (83, 10722),

Gene: RanchParmCat_1 Start: 49, Stop: 504, Start Num: 19
Candidate Starts for RanchParmCat_1:
(Start: 19 @49 has 17 MA's), (54, 262), (67, 355), (71, 403), (84, 490),

Gene: RedBaron_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for RedBaron_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364), (91, 526),

Gene: RedRaider77_33 Start: 10197, Stop: 10631, Start Num: 24
Candidate Starts for RedRaider77_33:
(1, 10062), (Start: 24 @10197 has 11 MA's), (Start: 38 @10278 has 5 MA's), (55, 10398), (60, 10428), (67, 10488), (83, 10623),

Gene: SPB78_1 Start: 51220, Stop: 426, Start Num: 19
Candidate Starts for SPB78_1:
(7, 51184), (Start: 19 @51220 has 17 MA's), (21, 51229), (Start: 33 @51298 has 1 MA's), (47, 51373), (50, 51406), (70, 51580),

Gene: Salvus_5 Start: 1624, Stop: 2100, Start Num: 25
Candidate Starts for Salvus_5:
(12, 1576), (Start: 25 @1624 has 3 MA's), (36, 1687), (37, 1690), (44, 1720), (53, 1822), (80, 2047), (88, 2068), (90, 2077),

Gene: SheckWes_1 Start: 98, Stop: 547, Start Num: 26
Candidate Starts for SheckWes_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (56, 284), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: SketchMex_1 Start: 52, Stop: 534, Start Num: 16
Candidate Starts for SketchMex_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (67, 364), (71, 412), (89, 523),

Gene: Snek_2 Start: 958, Stop: 1422, Start Num: 19
Candidate Starts for Snek_2:
(Start: 19 @958 has 17 MA's), (61, 1207), (79, 1396), (82, 1405),

Gene: Socotra_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Socotra_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364),

Gene: Sopespian_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Sopespian_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (54, 271), (61, 319), (67, 364),

Gene: Starburst_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Starburst_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364),

Gene: SteamedHams_1 Start: 59, Stop: 535, Start Num: 19
Candidate Starts for SteamedHams_1:
(6, 14), (Start: 19 @59 has 17 MA's), (28, 107), (45, 188), (51, 242), (54, 272), (67, 365), (71, 413), (89, 524),

Gene: SummitAcademy_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for SummitAcademy_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: Survivors_2 Start: 426, Stop: 911, Start Num: 17
Candidate Starts for Survivors_2:
(8, 399), (Start: 17 @426 has 22 MA's), (Start: 33 @507 has 1 MA's), (54, 660), (58, 681), (67, 753), (69, 792),

Gene: SweatNTears_2 Start: 757, Stop: 1155, Start Num: 33
Candidate Starts for SweatNTears_2:
(Start: 18 @679 has 1 MA's), (Start: 33 @757 has 1 MA's), (45, 808), (51, 862), (54, 892), (56, 904), (61, 940), (67, 985), (89, 1144),

Gene: Tarnish_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for Tarnish_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (48, 221), (49, 224), (54, 272), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: Tesla_32 Start: 10046, Stop: 10480, Start Num: 24
Candidate Starts for Tesla_32:
(1, 9911), (Start: 24 @10046 has 11 MA's), (Start: 38 @10127 has 5 MA's), (55, 10247), (60, 10277), (67, 10337), (83, 10472),

Gene: Tolls_1 Start: 59, Stop: 535, Start Num: 19
Candidate Starts for Tolls_1:
(6, 14), (Start: 19 @59 has 17 MA's), (28, 107), (45, 188), (51, 242), (54, 272), (61, 320), (67, 365), (71, 413), (89, 524),

Gene: Troje_1 Start: 53, Stop: 535, Start Num: 16
Candidate Starts for Troje_1:
(6, 14), (Start: 16 @53 has 20 MA's), (Start: 26 @98 has 2 MA's), (45, 188), (51, 242), (54, 272), (67, 365), (71, 413), (89, 524),

Gene: Tweety19_2 Start: 958, Stop: 1422, Start Num: 19
Candidate Starts for Tweety19_2:
(Start: 19 @958 has 17 MA's), (61, 1207), (79, 1396), (82, 1405),

Gene: Typhonomachy_1 Start: 52, Stop: 543, Start Num: 16
Candidate Starts for Typhonomachy_1:
(7, 22), (Start: 16 @52 has 20 MA's), (Start: 26 @97 has 2 MA's), (45, 187), (49, 223), (51, 241), (54, 271), (61, 319), (67, 364),

Gene: VWB_1 Start: 1, Stop: 480, Start Num: 19
Candidate Starts for VWB_1:
(Start: 19 @1 has 17 MA's), (21, 10), (32, 76), (47, 154), (50, 187), (70, 361), (71, 364),

Gene: VasuNzinga_33 Start: 9630, Stop: 10064, Start Num: 24
Candidate Starts for VasuNzinga_33:
(1, 9495), (Start: 24 @9630 has 11 MA's), (Start: 38 @9711 has 5 MA's), (55, 9831), (60, 9861), (67, 9921), (83, 10056),

Gene: Vine_2 Start: 681, Stop: 1172, Start Num: 17
Candidate Starts for Vine_2:
(Start: 17 @681 has 22 MA's), (28, 732), (Start: 33 @762 has 1 MA's), (45, 813), (49, 849), (54, 897), (56, 909), (61, 945), (66, 984), (67, 990), (69, 1029), (71, 1038), (74, 1059),

Gene: Wallaby_2 Start: 425, Stop: 922, Start Num: 17
Candidate Starts for Wallaby_2:
(8, 398), (Start: 17 @425 has 22 MA's), (Start: 33 @506 has 1 MA's), (54, 659), (58, 680), (67, 752), (69, 791), (87, 899),

Gene: Wolfwood_2 Start: 425, Stop: 922, Start Num: 17
Candidate Starts for Wolfwood_2:
(8, 398), (Start: 17 @425 has 22 MA's), (Start: 33 @506 has 1 MA's), (54, 659), (58, 680), (67, 752), (69, 791), (87, 899),

Gene: Yakult_1 Start: 48, Stop: 503, Start Num: 19
Candidate Starts for Yakult_1:
(Start: 19 @48 has 17 MA's), (Start: 35 @135 has 1 MA's), (45, 177), (54, 261), (67, 354), (71, 402), (84, 489),

Gene: Yarn_1 Start: 59, Stop: 535, Start Num: 19
Candidate Starts for Yarn_1:
(6, 14), (Start: 19 @59 has 17 MA's), (28, 107), (45, 188), (51, 242), (54, 272), (61, 320), (67, 365), (71, 413), (89, 524),

Gene: Yucky_1 Start: 56, Stop: 547, Start Num: 17
Candidate Starts for Yucky_1:
(Start: 17 @56 has 22 MA's), (Start: 26 @98 has 2 MA's), (Start: 35 @146 has 1 MA's), (49, 224), (54, 272), (56, 284), (66, 359), (67, 365), (69, 404), (71, 413), (74, 434),

Gene: Yummy_1 Start: 53, Stop: 535, Start Num: 16
Candidate Starts for Yummy_1:
(6, 14), (Start: 16 @53 has 20 MA's), (Start: 26 @98 has 2 MA's), (45, 188), (51, 242), (54, 272), (67, 365), (71, 413), (89, 524),

Gene: Zareef_2 Start: 426, Stop: 923, Start Num: 17
Candidate Starts for Zareef_2:
(8, 399), (Start: 17 @426 has 22 MA's), (Start: 33 @507 has 1 MA's), (54, 660), (58, 681), (67, 753), (69, 792), (87, 900),