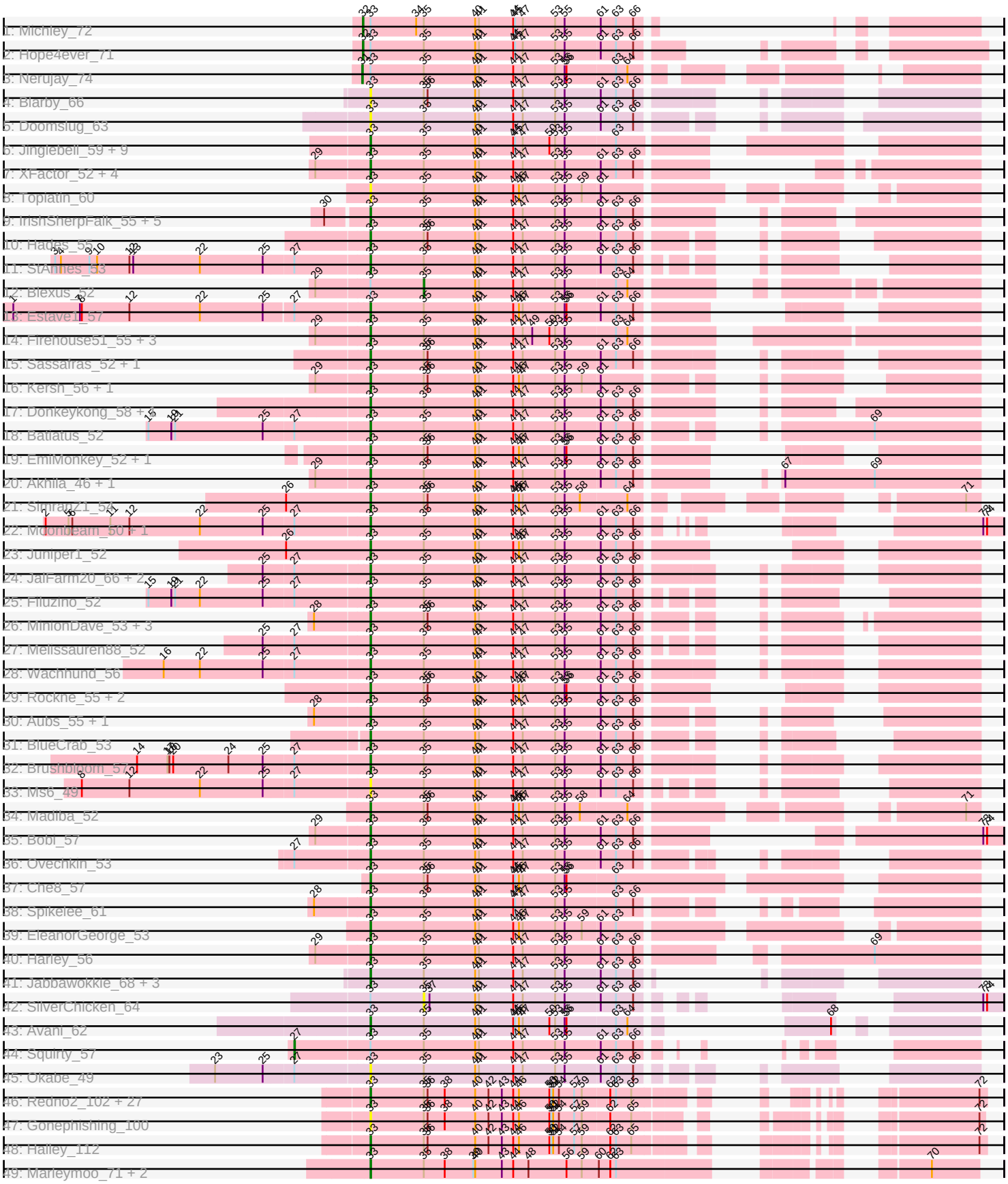
# Pham 347414


1: Michley_72
2: Hope4ever_71
3: Nerujay_74
4: Blarby_66
5: Doomslug_63
6: Jinglebell_59 + 9
7: XFactor_52 + 4
8: Toplatin_60
9: IrishSherpFalk_55 + 5
10: Hades_55
11: StAnnes_53
12: Blexus_52
13: Estavel1_57
14: Firehouse51_55 + 3
15: Sassafras_52 + 1
16: Kersh_56 + 1
17: Donkeykong_58 + 1
18: Batiatus_52
19: EmiMonkey_52 + 1
20: Akhila_46 + 1
21: Sibrad21_52
22: Moondeam_50 + 1
23: Juniper1_52
24: JaiFarm20_66 + 2
25: Fluzino_52
26: MinionDave_53 + 3
27: Melissauren88_52
28: Wachhund_56
29: Rockne_55 + 2
30: Aubs_55 + 1
31: BlueCrab_53
32: Brushbloom_57
33: Ms6_49
34: Madiba_52
35: Bobi_57
36: Ovechkin_53
37: Che8_57
38: Spikelee_61
39: EleanorGeorge_53
40: Harley_56
41: Jabbawokkie_68 + 3
42: SilverChicken_64
43: Avani_62
44: Squirty_57
45: Okabe_49
46: Redno2_102 + 27
47: Gonephishing_100
48: Halley_112
49: Marleymoo_71 + 2

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 347414 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347414 has 116 members, 16 are drafts.

Phages represented in each track:
• Track 1 : Michley_72
• Track 2 : Hope4ever_71
• Track 3 : Nerujay_74
• Track 4 : Blarby_66
• Track 5 : Doomslug_63
• Track 6 : Jinglebell_59, Constella_109, Ochi17_57, Oksu_60, Llama_59, Modragons_58, Seabastian_59, AlpineSix_59, OfUltron_59, Nichirin_58
• Track 7 : XFactor_52, Ibhubesi_54, Tchotchke_56, KristaRAM_57, MilleniumForce_58
• Track 8 : Topiatin_60
• Track 9 : IrishSherpFalk_55, Phanphagia_52, Shauna1_53, Spartacus_56, SuperGrey_58, WillSterrel_55
• Track 10 : Hades_55
• Track 11 : StAnnes_53
• Track 12 : Blexus_52
• Track 13 : Estave1_57
• Track 14 : Firehouse51_55, Mutaforma13_58, TChen_54, LunaStella_52
• Track 15 : Sassafras_52, Inventum_49
• Track 16 : Kersh_56, ShroomBoi_56
• Track 17 : Donkeykong_58, Wee_57
• Track 18 : Batiatus_52
• Track 19 : EmiMonkey_52, PhlipPhlop_54
• Track 20 : Akhila_46, MilanaBonita_45
• Track 21 : SimranZ1_54
• Track 22 : Moonbeam_50, Emma_54
• Track 23 : Juniper1_52
• Track 24 : JalFarm20_66, Flathead_54, Hegedechwinu_54
• Track 25 : Filuzino_52
• Track 26 : MinionDave_53, CaptainTrips_51, SG4_51, Enby_55
• Track 27 : Melissauren88_52
• Track 28 : Wachhund_56
• Track 29 : Rockne_55, PMC_51, Boomer_59
• Track 30 : Aubs_55, Guppsters_55
• Track 31 : BlueCrab_53
• Track 32 : Brushbloom_57
• Track 33 : Ms6_49
• Track 34 : Madiba_52

• Track 35 : Bobi_57
• Track 36 : Ovechkin_53
• Track 37 : Che8_57
• Track 38 : Spikelee_61
• Track 39 : EleanorGeorge_53
• Track 40 : Harley_56
• Track 41 : Jabbawokkie_68, Zapner_67, Juice456_55, Soul22_58
• Track 42 : SilverChicken_64
• Track 43 : Avani_62
• Track 44 : Squirty_57
• Track 45 : Okabe_49
• Track 46 : Redno2_102, Zelink_106, Ejimix_104, Ariel_106, BronnyJames_104, Lucky2013_103, Courthouse_101, Shaboozey_104, Porcelain_104, LittleE_110, Hughesyang_109, KashFlow_103, Dallas_111, Odette_112, Phoebus_111, Beem_112, Nekros_109, JuicyJay_107, EricMillard_103, Bagrid_111, Squint_104, MiaZeal_106, Superphikiman_103, Nibley_99, Rearden_100, Kalah2_103, DmpstrDiver_111, ThreeRngTarjay_107
• Track 47 : Gonephishing_100
• Track 48 : Halley_112
• Track 49 : Marleymoo_71, Bobby_79, Hidrated_72

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

The start number called the most often in the published annotations is 33, it was called in 95 of the 100 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Akhila_46, AlpineSix_59, Ariel_106, Aubs_55, Avani_62, Bagrid_111, Batiatus_52, Beem_112, Blarby_66, BlueCrab_53, Bobby_79, Bobi_57, Boomer_59, BronnyJames_104, Brushbloom_57, CaptainTrips_51, Che8_57, Constella_109, Courthouse_101, Dallas_111, DmpstrDiver_111, Donkeykong_58, Doomslug_63, Ejimix_104, EleanorGeorge_53, EmiMonkey_52, Emma_54, Enby_55, EricMillard_103, Estave1_57, Filuzino_52, Firehouse51_55, Flathead_54, Gonephishing_100, Guppsters_55, Hades_55, Halley_112, Harley_56, Hegedechwinu_54, Hidrated_72, Hughesyang_109, Ibhubesi_54, Inventum_49, IrishSherpFalk_55, Jabbawokkie_68, JalFarm20_66, Jinglebell_59, Juice456_55, JuicyJay_107, Juniper1_52, Kalah2_103, KashFlow_103, Kersh_56, KristaRAM_57, LittleE_110, Llama_59, Lucky2013_103, LunaStella_52, Madiba_52, Marleymoo_71, Melissauren88_52, MiaZeal_106, MilanaBonita_45, MilleniumForce_58, MinionDave_53, Modragons_58, Moonbeam_50, Ms6_49, Mutaforma13_58, Nekros_109, Nibley_99, Nichirin_58, Ochi17_57, Odette_112, OfUltron_59, Okabe_49, Oksu_60, Ovechkin_53, PMC_51, Phanphagia_52, PhlipPhlop_54, Phoebus_111, Porcelain_104, Rearden_100, Redno2_102, Rockne_55, SG4_51, Sassafras_52, Seabastian_59, Shaboozey_104, Shauna1_53, ShroomBoi_56, SimranZ1_54, Soul22_58, Spartacus_56, Spikelee_61, Squint_104, StAnnes_53, SuperGrey_58, Superphikiman_103, TChen_54, Tchotchke_56, ThreeRngTarjay_107, Topiatin_60, Wachhund_56, Wee_57, WillSterrel_55, XFactor_52, Zapner_67, Zelink_106,

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

• Blexus_52, Hope4ever_71, Michley_72, Nerujay_74, SilverChicken_64, Squirty_57,

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

**Summary by start number:**

Start 27:
• Found in 16 of 116 ( 13.8% ) of genes in pham
• Manual Annotations of this start: 1 of 100
• Called 6.2% of time when present
• Phage (with cluster) where this start called: Squirty_57 (F3),

Start 31:
• Found in 1 of 116 ( 0.9% ) of genes in pham
• Manual Annotations of this start: 1 of 100
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nerujay_74 (A1),

Start 32:
• Found in 2 of 116 ( 1.7% ) of genes in pham
• Manual Annotations of this start: 2 of 100
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hope4ever_71 (A1), Michley_72 (A1),

Start 33:
• Found in 116 of 116 ( 100.0% ) of genes in pham
• Manual Annotations of this start: 95 of 100
• Called 94.8% of time when present
• Phage (with cluster) where this start called: Akhila_46 (F1), AlpineSix_59 (F1), Ariel_106 (J), Aubs_55 (F1), Avani_62 (F2), Bagrid_111 (J), Batiatus_52 (F1), Beem_112 (J), Blarby_66 (F), BlueCrab_53 (F1), Bobby_79 (J), Bobi_57 (F1), Boomer_59 (F1), BronnyJames_104 (J), Brushbloom_57 (F1), CaptainTrips_51 (F1), Che8_57 (F1), Constella_109 (J), Courthouse_101 (J), Dallas_111 (J), DmpstrDiver_111 (J), Donkeykong_58 (F1), Doomslug_63 (F), Ejimix_104 (J), EleanorGeorge_53 (F1), EmiMonkey_52 (F1), Emma_54 (F1), Enby_55 (F1), EricMillard_103 (J), Estave1_57 (F1), Filuzino_52 (F1), Firehouse51_55 (F1), Flathead_54 (F1), Gonephishing_100 (J), Guppsters_55 (F1), Hades_55 (F1), Halley_112 (J), Harley_56 (F1), Hegedechwinu_54 (F1), Hidrated_72 (J), Hughesyang_109 (J), Ibhubesi_54 (F1), Inventum_49 (F1), IrishSherpFalk_55 (F1), Jabbawokkie_68 (F2), JalFarm20_66 (F1), Jinglebell_59 (F1), Juice456_55 (F1), JuicyJay_107 (J), Juniper1_52 (F1), Kalah2_103 (J), KashFlow_103 (J), Kersh_56 (F1), KristaRAM_57 (F1), LittleE_110 (J), Llama_59 (F1), Lucky2013_103 (J), LunaStella_52 (F4), Madiba_52 (F1), Marleymoo_71 (J), Melissauren88_52 (F1), MiaZeal_106 (J), MilanaBonita_45 (F1), MilleniumForce_58 (F1), MinionDave_53 (F1), Modragons_58 (F1), Moonbeam_50 (F1), Ms6_49 (F1), Mutaforma13_58 (F1), Nekros_109 (J), Nibley_99 (J), Nichirin_58 (F1), Ochi17_57 (F1), Odette_112 (J), OfUltron_59 (F1), Okabe_49 (F8), Oksu_60 (F1), Ovechkin_53 (F1), PMC_51 (F1), Phanphagia_52 (F1), PhlipPhlop_54 (F1), Phoebus_111 (J), Porcelain_104 (J), Rearden_100 (J), Redno2_102 (J), Rockne_55 (F1), SG4_51 (F1), Sassafras_52 (F1), Seabastian_59 (F1), Shaboozey_104 (J), Shauna1_53 (F1), ShroomBoi_56 (F1), SimranZ1_54 (F1), Soul22_58 (F2), Spartacus_56 (F1), Spikelee_61 (F1), Squint_104 (J), StAnnes_53 (F1), SuperGrey_58 (F1), Superphikiman_103 (J),

TChen_54 (F4), Tchotchke_56 (F1), ThreeRngTarjay_107 (J), Topiatin_60 (F1), Wachhund_56 (F1), Wee_57 (F1), WillSterrel_55 (F1), XFactor_52 (F1), Zapner_67 (F2), Zelink_106 (J),

Start 35:
• Found in 116 of 116 ( 100.0% ) of genes in pham
• Manual Annotations of this start: 1 of 100
• Called 1.7% of time when present
• Phage (with cluster) where this start called: Blexus_52 (F1), SilverChicken_64 (F2),

**Summary by clusters:**

There are 8 clusters represented in this pham: F1, F2, F3, F4, F, F8, J, A1,

Info for manual annotations of cluster A1:
•Start number 31 was manually annotated 1 time for cluster A1.
•Start number 32 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster F1:
•Start number 33 was manually annotated 64 times for cluster F1.
•Start number 35 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:
•Start number 33 was manually annotated 4 times for cluster F2.

Info for manual annotations of cluster F3:
•Start number 27 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:
•Start number 33 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster J:
•Start number 33 was manually annotated 25 times for cluster J.

***Gene Information:***

Gene: Akhila_46 Start: 33953, Stop: 34786, Start Num: 33
Candidate Starts for Akhila_46:
(29, 33872), (Start: 33 @33953 has 95 MA's), (Start: 35 @34037 has 1 MA's), (40, 34118), (41, 34124), (44, 34178), (47, 34193), (53, 34244), (55, 34259), (61, 34313), (63, 34337), (66, 34364), (67, 34481), (69, 34622),

Gene: AlpineSix_59 Start: 40040, Stop: 40867, Start Num: 33
Candidate Starts for AlpineSix_59:
(Start: 33 @40040 has 95 MA's), (Start: 35 @40124 has 1 MA's), (40, 40205), (41, 40211), (44, 40265), (45, 40268), (47, 40280), (50, 40322), (53, 40331), (55, 40346), (63, 40424),

Gene: Ariel_106 Start: 58305, Stop: 59027, Start Num: 33
Candidate Starts for Ariel_106:

(Start: 33 @58305 has 95 MA's), (Start: 35 @58389 has 1 MA's), (36, 58395), (38, 58422), (40, 58470), (42, 58491), (43, 58512), (44, 58530), (46, 58539), (50, 58587), (51, 58590), (52, 58593), (54, 58602), (57, 58626), (59, 58638), (62, 58680), (63, 58689), (65, 58713), (72, 59016),

Gene: Aubs_55 Start: 38287, Stop: 39039, Start Num: 33
Candidate Starts for Aubs_55:
(28, 38206), (Start: 33 @38287 has 95 MA's), (Start: 35 @38371 has 1 MA's), (40, 38452), (41, 38458), (44, 38512), (47, 38527), (53, 38578), (55, 38593), (61, 38647), (63, 38671), (66, 38698),

Gene: Avani_62 Start: 38318, Stop: 38998, Start Num: 33
Candidate Starts for Avani_62:
(Start: 33 @38318 has 95 MA's), (Start: 35 @38402 has 1 MA's), (40, 38483), (41, 38489), (44, 38543), (45, 38546), (46, 38552), (47, 38558), (50, 38600), (53, 38609), (55, 38624), (56, 38627), (63, 38702), (64, 38720), (68, 38834),

Gene: Bagrid_111 Start: 62698, Stop: 63411, Start Num: 33
Candidate Starts for Bagrid_111:
(Start: 33 @62698 has 95 MA's), (Start: 35 @62782 has 1 MA's), (36, 62788), (38, 62815), (40, 62863), (42, 62884), (43, 62905), (44, 62923), (46, 62932), (50, 62980), (51, 62983), (52, 62986), (54, 62995), (57, 63019), (59, 63031), (62, 63073), (63, 63082), (65, 63106), (72, 63403),

Gene: Batiatus_52 Start: 37730, Stop: 38563, Start Num: 33
Candidate Starts for Batiatus_52:
(15, 37391), (19, 37427), (21, 37433), (25, 37571), (Start: 27 @37616 has 1 MA's), (Start: 33 @37730 has 95 MA's), (Start: 35 @37814 has 1 MA's), (40, 37895), (41, 37901), (44, 37955), (47, 37970), (53, 38021), (55, 38036), (61, 38090), (63, 38114), (66, 38141), (69, 38399),

Gene: Beem_112 Start: 63863, Stop: 64612, Start Num: 33
Candidate Starts for Beem_112:
(Start: 33 @63863 has 95 MA's), (Start: 35 @63947 has 1 MA's), (36, 63953), (38, 63980), (40, 64028), (42, 64049), (43, 64070), (44, 64088), (46, 64097), (50, 64145), (51, 64148), (52, 64151), (54, 64160), (57, 64184), (59, 64196), (62, 64238), (63, 64247), (65, 64271), (72, 64601),

Gene: Blarby_66 Start: 39313, Stop: 40095, Start Num: 33
Candidate Starts for Blarby_66:
(Start: 33 @39313 has 95 MA's), (Start: 35 @39397 has 1 MA's), (36, 39403), (40, 39478), (41, 39484), (44, 39538), (47, 39553), (53, 39604), (55, 39619), (61, 39673), (63, 39697), (66, 39724),

Gene: Blexus_52 Start: 37963, Stop: 38715, Start Num: 35
Candidate Starts for Blexus_52:
(29, 37798), (Start: 33 @37879 has 95 MA's), (Start: 35 @37963 has 1 MA's), (40, 38044), (41, 38050), (44, 38104), (47, 38119), (53, 38170), (55, 38185), (63, 38263), (64, 38281),

Gene: BlueCrab_53 Start: 38090, Stop: 38827, Start Num: 33
Candidate Starts for BlueCrab_53:
(Start: 33 @38090 has 95 MA's), (Start: 35 @38174 has 1 MA's), (40, 38255), (41, 38261), (44, 38315), (47, 38330), (53, 38381), (55, 38396), (61, 38450), (63, 38474), (66, 38501),

Gene: Bobby_79 Start: 52969, Stop: 52163, Start Num: 33
Candidate Starts for Bobby_79:
(Start: 33 @52969 has 95 MA's), (Start: 35 @52885 has 1 MA's), (38, 52852), (39, 52807), (40, 52804), (43, 52762), (44, 52744), (48, 52720), (56, 52660), (59, 52636), (60, 52609), (62, 52591), (63, 52582), (70, 52237),

Gene: Bobi_57 Start: 39144, Stop: 39935, Start Num: 33
Candidate Starts for Bobi_57:
(29, 39063), (Start: 33 @39144 has 95 MA's), (Start: 35 @39228 has 1 MA's), (40, 39309), (41, 39315), (44, 39369), (47, 39384), (53, 39435), (55, 39450), (61, 39504), (63, 39528), (66, 39555), (73, 39903), (74, 39909),

Gene: Boomer_59 Start: 39890, Stop: 40651, Start Num: 33
Candidate Starts for Boomer_59:
(Start: 33 @39890 has 95 MA's), (Start: 35 @39974 has 1 MA's), (36, 39980), (40, 40055), (41, 40061), (44, 40115), (46, 40124), (47, 40130), (53, 40181), (55, 40196), (56, 40199), (61, 40250), (63, 40274), (66, 40301),

Gene: BronnyJames_104 Start: 58779, Stop: 59513, Start Num: 33
Candidate Starts for BronnyJames_104:
(Start: 33 @58779 has 95 MA's), (Start: 35 @58863 has 1 MA's), (36, 58869), (38, 58896), (40, 58944), (42, 58965), (43, 58986), (44, 59004), (46, 59013), (50, 59061), (51, 59064), (52, 59067), (54, 59076), (57, 59100), (59, 59112), (62, 59154), (63, 59163), (65, 59187), (72, 59502),

Gene: Brushbloom_57 Start: 38889, Stop: 39671, Start Num: 33
Candidate Starts for Brushbloom_57:
(14, 38532), (17, 38580), (18, 38583), (20, 38589), (24, 38676), (25, 38730), (Start: 27 @38775 has 1 MA's), (Start: 33 @38889 has 95 MA's), (Start: 35 @38973 has 1 MA's), (40, 39054), (41, 39060), (44, 39114), (47, 39129), (53, 39180), (55, 39195), (61, 39249), (63, 39273), (66, 39300),

Gene: CaptainTrips_51 Start: 37041, Stop: 37829, Start Num: 33
Candidate Starts for CaptainTrips_51:
(28, 36960), (Start: 33 @37041 has 95 MA's), (Start: 35 @37125 has 1 MA's), (36, 37131), (40, 37206), (41, 37212), (44, 37266), (47, 37281), (53, 37332), (55, 37347), (61, 37401), (63, 37425), (66, 37452),

Gene: Che8_57 Start: 39191, Stop: 40054, Start Num: 33
Candidate Starts for Che8_57:
(Start: 33 @39191 has 95 MA's), (Start: 35 @39275 has 1 MA's), (36, 39281), (40, 39356), (41, 39362), (44, 39416), (45, 39419), (46, 39425), (47, 39431), (53, 39482), (55, 39497), (56, 39500), (63, 39575),

Gene: Constella_109 Start: 63673, Stop: 64416, Start Num: 33
Candidate Starts for Constella_109:
(Start: 33 @63673 has 95 MA's), (Start: 35 @63757 has 1 MA's), (40, 63838), (41, 63844), (44, 63898), (45, 63901), (47, 63913), (50, 63955), (53, 63964), (55, 63979), (63, 64057),

Gene: Courthouse_101 Start: 57905, Stop: 58627, Start Num: 33
Candidate Starts for Courthouse_101:
(Start: 33 @57905 has 95 MA's), (Start: 35 @57989 has 1 MA's), (36, 57995), (38, 58022), (40, 58070), (42, 58091), (43, 58112), (44, 58130), (46, 58139), (50, 58187), (51, 58190), (52, 58193), (54, 58202), (57, 58226), (59, 58238), (62, 58280), (63, 58289), (65, 58313), (72, 58616),

Gene: Dallas_111 Start: 63567, Stop: 64280, Start Num: 33
Candidate Starts for Dallas_111:
(Start: 33 @63567 has 95 MA's), (Start: 35 @63651 has 1 MA's), (36, 63657), (38, 63684), (40, 63732), (42, 63753), (43, 63774), (44, 63792), (46, 63801), (50, 63849), (51, 63852), (52, 63855), (54, 63864), (57, 63888), (59, 63900), (62, 63942), (63, 63951), (65, 63975), (72, 64272),

Gene: DmpstrDiver_111 Start: 62987, Stop: 63700, Start Num: 33

Candidate Starts for DmpstrDiver_111:
(Start: 33 @62987 has 95 MA's), (Start: 35 @63071 has 1 MA's), (36, 63077), (38, 63104), (40, 63152), (42, 63173), (43, 63194), (44, 63212), (46, 63221), (50, 63269), (51, 63272), (52, 63275), (54, 63284), (57, 63308), (59, 63320), (62, 63362), (63, 63371), (65, 63395), (72, 63692),

Gene: Donkeykong_58 Start: 40479, Stop: 41291, Start Num: 33
Candidate Starts for Donkeykong_58:
(Start: 33 @40479 has 95 MA's), (Start: 35 @40563 has 1 MA's), (40, 40644), (41, 40650), (44, 40704), (47, 40719), (53, 40770), (55, 40785), (61, 40839), (63, 40863), (66, 40890),

Gene: Doomslug_63 Start: 38053, Stop: 38853, Start Num: 33
Candidate Starts for Doomslug_63:
(Start: 33 @38053 has 95 MA's), (Start: 35 @38137 has 1 MA's), (40, 38218), (41, 38224), (44, 38278), (47, 38293), (53, 38344), (55, 38359), (61, 38413), (63, 38437), (66, 38464),

Gene: Ejimix_104 Start: 63590, Stop: 64306, Start Num: 33
Candidate Starts for Ejimix_104:
(Start: 33 @63590 has 95 MA's), (Start: 35 @63674 has 1 MA's), (36, 63680), (38, 63707), (40, 63755), (42, 63776), (43, 63797), (44, 63815), (46, 63824), (50, 63872), (51, 63875), (52, 63878), (54, 63887), (57, 63911), (59, 63923), (62, 63965), (63, 63974), (65, 63998), (72, 64295),

Gene: EleanorGeorge_53 Start: 37536, Stop: 38372, Start Num: 33
Candidate Starts for EleanorGeorge_53:
(Start: 33 @37536 has 95 MA's), (Start: 35 @37620 has 1 MA's), (40, 37701), (41, 37707), (44, 37761), (46, 37770), (47, 37776), (53, 37827), (55, 37842), (59, 37869), (61, 37896), (63, 37920),

Gene: EmiMonkey_52 Start: 39203, Stop: 39964, Start Num: 33
Candidate Starts for EmiMonkey_52:
(Start: 33 @39203 has 95 MA's), (Start: 35 @39287 has 1 MA's), (36, 39293), (40, 39368), (41, 39374), (44, 39428), (46, 39437), (47, 39443), (53, 39494), (55, 39509), (56, 39512), (61, 39563), (63, 39587), (66, 39614),

Gene: Emma_54 Start: 37254, Stop: 37994, Start Num: 33
Candidate Starts for Emma_54:
(2, 36753), (5, 36789), (6, 36795), (11, 36855), (12, 36885), (22, 36996), (25, 37095), (Start: 27 @37140 has 1 MA's), (Start: 33 @37254 has 95 MA's), (Start: 35 @37338 has 1 MA's), (40, 37419), (41, 37425), (44, 37479), (47, 37494), (53, 37545), (55, 37560), (61, 37614), (63, 37638), (66, 37665), (73, 37962), (74, 37968),

Gene: Enby_55 Start: 36476, Stop: 37276, Start Num: 33
Candidate Starts for Enby_55:
(28, 36395), (Start: 33 @36476 has 95 MA's), (Start: 35 @36560 has 1 MA's), (36, 36566), (40, 36641), (41, 36647), (44, 36701), (47, 36716), (53, 36767), (55, 36782), (61, 36836), (63, 36860), (66, 36887),

Gene: EricMillard_103 Start: 62627, Stop: 63340, Start Num: 33
Candidate Starts for EricMillard_103:
(Start: 33 @62627 has 95 MA's), (Start: 35 @62711 has 1 MA's), (36, 62717), (38, 62744), (40, 62792), (42, 62813), (43, 62834), (44, 62852), (46, 62861), (50, 62909), (51, 62912), (52, 62915), (54, 62924), (57, 62948), (59, 62960), (62, 63002), (63, 63011), (65, 63035), (72, 63332),

Gene: Estave1_57 Start: 38696, Stop: 39457, Start Num: 33
Candidate Starts for Estave1_57:

(1, 38144), (7, 38249), (8, 38252), (12, 38327), (22, 38438), (25, 38537), (Start: 27 @38582 has 1 MA's), (Start: 33 @38696 has 95 MA's), (Start: 35 @38780 has 1 MA's), (40, 38861), (41, 38867), (44, 38921), (46, 38930), (47, 38936), (53, 38987), (55, 39002), (56, 39005), (61, 39056), (63, 39080), (66, 39107),

Gene: Filuzino_52 Start: 36777, Stop: 37517, Start Num: 33
Candidate Starts for Filuzino_52:
(15, 36438), (19, 36474), (21, 36480), (22, 36519), (25, 36618), (Start: 27 @36663 has 1 MA's), (Start: 33 @36777 has 95 MA's), (Start: 35 @36861 has 1 MA's), (40, 36942), (41, 36948), (44, 37002), (47, 37017), (53, 37068), (55, 37083), (61, 37137), (63, 37161), (66, 37188),

Gene: Firehouse51_55 Start: 40981, Stop: 41853, Start Num: 33
Candidate Starts for Firehouse51_55:
(29, 40900), (Start: 33 @40981 has 95 MA's), (Start: 35 @41065 has 1 MA's), (40, 41146), (41, 41152), (44, 41206), (47, 41221), (49, 41236), (50, 41263), (53, 41272), (55, 41287), (63, 41365), (64, 41383),

Gene: Flathead_54 Start: 38269, Stop: 38985, Start Num: 33
Candidate Starts for Flathead_54:
(25, 38110), (Start: 27 @38155 has 1 MA's), (Start: 33 @38269 has 95 MA's), (Start: 35 @38353 has 1 MA's), (40, 38434), (41, 38440), (44, 38494), (47, 38509), (53, 38560), (55, 38575), (61, 38629), (63, 38653), (66, 38680),

Gene: Gonephishing_100 Start: 57462, Stop: 58205, Start Num: 33
Candidate Starts for Gonephishing_100:
(Start: 33 @57462 has 95 MA's), (Start: 35 @57546 has 1 MA's), (36, 57552), (38, 57579), (40, 57627), (42, 57648), (43, 57669), (44, 57687), (46, 57696), (50, 57744), (51, 57747), (52, 57750), (54, 57759), (57, 57783), (59, 57795), (62, 57837), (65, 57870), (72, 58197),

Gene: Guppsters_55 Start: 37293, Stop: 38045, Start Num: 33
Candidate Starts for Guppsters_55:
(28, 37212), (Start: 33 @37293 has 95 MA's), (Start: 35 @37377 has 1 MA's), (40, 37458), (41, 37464), (44, 37518), (47, 37533), (53, 37584), (55, 37599), (61, 37653), (63, 37677), (66, 37704),

Gene: Hades_55 Start: 38378, Stop: 39154, Start Num: 33
Candidate Starts for Hades_55:
(Start: 33 @38378 has 95 MA's), (Start: 35 @38462 has 1 MA's), (36, 38468), (40, 38543), (41, 38549), (44, 38603), (47, 38618), (53, 38669), (55, 38684), (61, 38738), (63, 38762), (66, 38789),

Gene: Halley_112 Start: 63864, Stop: 64622, Start Num: 33
Candidate Starts for Halley_112:
(Start: 33 @63864 has 95 MA's), (Start: 35 @63948 has 1 MA's), (36, 63954), (40, 64029), (42, 64050), (43, 64071), (44, 64089), (46, 64098), (50, 64146), (51, 64149), (52, 64152), (54, 64161), (57, 64185), (59, 64197), (62, 64239), (63, 64248), (65, 64272), (72, 64611),

Gene: Harley_56 Start: 38076, Stop: 38933, Start Num: 33
Candidate Starts for Harley_56:
(29, 37995), (Start: 33 @38076 has 95 MA's), (Start: 35 @38160 has 1 MA's), (40, 38241), (41, 38247), (44, 38301), (47, 38316), (53, 38367), (55, 38382), (61, 38436), (63, 38460), (66, 38487), (69, 38769),

Gene: Hegedechwinu_54 Start: 36679, Stop: 37368, Start Num: 33
Candidate Starts for Hegedechwinu_54:
(25, 36520), (Start: 27 @36565 has 1 MA's), (Start: 33 @36679 has 95 MA's), (Start: 35 @36763 has 1 MA's), (40, 36844), (41, 36850), (44, 36904), (47, 36919), (53, 36970), (55, 36985), (61, 37039), (63,

37063), (66, 37090),

Gene: Hidrated_72 Start: 52054, Stop: 51440, Start Num: 33
Candidate Starts for Hidrated_72:
(Start: 33 @52054 has 95 MA's), (Start: 35 @51970 has 1 MA's), (38, 51937), (39, 51892), (40, 51889), (43, 51847), (44, 51829), (48, 51805), (56, 51745), (59, 51721), (60, 51694), (62, 51676), (63, 51667), (70, 51514),

Gene: Hope4ever_71 Start: 44113, Stop: 43361, Start Num: 32
Candidate Starts for Hope4ever_71:
(Start: 32 @44113 has 2 MA's), (Start: 33 @44101 has 95 MA's), (Start: 35 @44017 has 1 MA's), (40, 43936), (41, 43930), (44, 43876), (45, 43873), (47, 43861), (53, 43810), (55, 43795), (61, 43741), (63, 43717), (66, 43690),

Gene: Hughesyang_109 Start: 63518, Stop: 64231, Start Num: 33
Candidate Starts for Hughesyang_109:
(Start: 33 @63518 has 95 MA's), (Start: 35 @63602 has 1 MA's), (36, 63608), (38, 63635), (40, 63683), (42, 63704), (43, 63725), (44, 63743), (46, 63752), (50, 63800), (51, 63803), (52, 63806), (54, 63815), (57, 63839), (59, 63851), (62, 63893), (63, 63902), (65, 63926), (72, 64223),

Gene: Ibhubesi_54 Start: 37585, Stop: 38349, Start Num: 33
Candidate Starts for Ibhubesi_54:
(29, 37504), (Start: 33 @37585 has 95 MA's), (Start: 35 @37669 has 1 MA's), (40, 37750), (41, 37756), (44, 37810), (47, 37825), (53, 37876), (55, 37891), (61, 37945), (63, 37969), (66, 37996),

Gene: Inventum_49 Start: 37068, Stop: 37850, Start Num: 33
Candidate Starts for Inventum_49:
(Start: 33 @37068 has 95 MA's), (Start: 35 @37152 has 1 MA's), (36, 37158), (40, 37233), (41, 37239), (44, 37293), (47, 37308), (53, 37359), (55, 37374), (61, 37428), (63, 37452), (66, 37479),

Gene: IrishSherpFalk_55 Start: 39198, Stop: 40010, Start Num: 33
Candidate Starts for IrishSherpFalk_55:
(30, 39135), (Start: 33 @39198 has 95 MA's), (Start: 35 @39282 has 1 MA's), (40, 39363), (41, 39369), (44, 39423), (47, 39438), (53, 39489), (55, 39504), (61, 39558), (63, 39582), (66, 39609),

Gene: Jabbawokkie_68 Start: 39326, Stop: 40015, Start Num: 33
Candidate Starts for Jabbawokkie_68:
(Start: 33 @39326 has 95 MA's), (Start: 35 @39410 has 1 MA's), (40, 39491), (41, 39497), (44, 39551), (47, 39566), (53, 39617), (55, 39632), (61, 39686), (63, 39710), (66, 39737),

Gene: JalFarm20_66 Start: 41299, Stop: 42081, Start Num: 33
Candidate Starts for JalFarm20_66:
(25, 41140), (Start: 27 @41185 has 1 MA's), (Start: 33 @41299 has 95 MA's), (Start: 35 @41383 has 1 MA's), (40, 41464), (41, 41470), (44, 41524), (47, 41539), (53, 41590), (55, 41605), (61, 41659), (63, 41683), (66, 41710),

Gene: Jinglebell_59 Start: 40039, Stop: 40866, Start Num: 33
Candidate Starts for Jinglebell_59:
(Start: 33 @40039 has 95 MA's), (Start: 35 @40123 has 1 MA's), (40, 40204), (41, 40210), (44, 40264), (45, 40267), (47, 40279), (50, 40321), (53, 40330), (55, 40345), (63, 40423),

Gene: Juice456_55 Start: 39438, Stop: 40220, Start Num: 33
Candidate Starts for Juice456_55:

(Start: 33 @39438 has 95 MA's), (Start: 35 @39522 has 1 MA's), (40, 39603), (41, 39609), (44, 39663), (47, 39678), (53, 39729), (55, 39744), (61, 39798), (63, 39822), (66, 39849),

Gene: JuicyJay_107 Start: 64998, Stop: 65747, Start Num: 33
Candidate Starts for JuicyJay_107:
(Start: 33 @64998 has 95 MA's), (Start: 35 @65082 has 1 MA's), (36, 65088), (38, 65115), (40, 65163), (42, 65184), (43, 65205), (44, 65223), (46, 65232), (50, 65280), (51, 65283), (52, 65286), (54, 65295), (57, 65319), (59, 65331), (62, 65373), (63, 65382), (65, 65406), (72, 65736),

Gene: Juniper1_52 Start: 37409, Stop: 38161, Start Num: 33
Candidate Starts for Juniper1_52:
(26, 37280), (Start: 33 @37409 has 95 MA's), (Start: 35 @37493 has 1 MA's), (40, 37574), (41, 37580), (44, 37634), (46, 37643), (47, 37649), (53, 37700), (55, 37715), (61, 37769), (63, 37793), (66, 37820),

Gene: Kalah2_103 Start: 62853, Stop: 63566, Start Num: 33
Candidate Starts for Kalah2_103:
(Start: 33 @62853 has 95 MA's), (Start: 35 @62937 has 1 MA's), (36, 62943), (38, 62970), (40, 63018), (42, 63039), (43, 63060), (44, 63078), (46, 63087), (50, 63135), (51, 63138), (52, 63141), (54, 63150), (57, 63174), (59, 63186), (62, 63228), (63, 63237), (65, 63261), (72, 63558),

Gene: KashFlow_103 Start: 58703, Stop: 59503, Start Num: 33
Candidate Starts for KashFlow_103:
(Start: 33 @58703 has 95 MA's), (Start: 35 @58787 has 1 MA's), (36, 58793), (38, 58820), (40, 58868), (42, 58889), (43, 58910), (44, 58928), (46, 58937), (50, 58985), (51, 58988), (52, 58991), (54, 59000), (57, 59024), (59, 59036), (62, 59078), (63, 59087), (65, 59111), (72, 59492),

Gene: Kersh_56 Start: 39838, Stop: 40602, Start Num: 33
Candidate Starts for Kersh_56:
(29, 39757), (Start: 33 @39838 has 95 MA's), (Start: 35 @39922 has 1 MA's), (36, 39928), (40, 40003), (41, 40009), (44, 40063), (46, 40072), (47, 40078), (53, 40129), (55, 40144), (59, 40171), (61, 40198),

Gene: KristaRAM_57 Start: 40065, Stop: 40805, Start Num: 33
Candidate Starts for KristaRAM_57:
(29, 39984), (Start: 33 @40065 has 95 MA's), (Start: 35 @40149 has 1 MA's), (40, 40230), (41, 40236), (44, 40290), (47, 40305), (53, 40356), (55, 40371), (61, 40425), (63, 40449), (66, 40476),

Gene: LittleE_110 Start: 61999, Stop: 62772, Start Num: 33
Candidate Starts for LittleE_110:
(Start: 33 @61999 has 95 MA's), (Start: 35 @62083 has 1 MA's), (36, 62089), (38, 62116), (40, 62164), (42, 62185), (43, 62206), (44, 62224), (46, 62233), (50, 62281), (51, 62284), (52, 62287), (54, 62296), (57, 62320), (59, 62332), (62, 62374), (63, 62383), (65, 62407), (72, 62764),

Gene: Llama_59 Start: 40037, Stop: 40720, Start Num: 33
Candidate Starts for Llama_59:
(Start: 33 @40037 has 95 MA's), (Start: 35 @40121 has 1 MA's), (40, 40202), (41, 40208), (44, 40262), (45, 40265), (47, 40277), (50, 40319), (53, 40328), (55, 40343), (63, 40421),

Gene: Lucky2013_103 Start: 58322, Stop: 59068, Start Num: 33
Candidate Starts for Lucky2013_103:
(Start: 33 @58322 has 95 MA's), (Start: 35 @58406 has 1 MA's), (36, 58412), (38, 58439), (40, 58487), (42, 58508), (43, 58529), (44, 58547), (46, 58556), (50, 58604), (51, 58607), (52, 58610), (54, 58619), (57, 58643), (59, 58655), (62, 58697), (63, 58706), (65, 58730), (72, 59057),

Gene: LunaStella_52 Start: 36750, Stop: 37514, Start Num: 33
Candidate Starts for LunaStella_52:
(29, 36669), (Start: 33 @36750 has 95 MA's), (Start: 35 @36834 has 1 MA's), (40, 36915), (41, 36921), (44, 36975), (47, 36990), (49, 37005), (50, 37032), (53, 37041), (55, 37056), (63, 37134), (64, 37152),

Gene: Madiba_52 Start: 36503, Stop: 37327, Start Num: 33
Candidate Starts for Madiba_52:
(Start: 33 @36503 has 95 MA's), (Start: 35 @36587 has 1 MA's), (36, 36593), (40, 36668), (41, 36674), (44, 36728), (45, 36731), (46, 36737), (47, 36743), (53, 36794), (55, 36809), (58, 36833), (64, 36905), (71, 37307),

Gene: Marleymoo_71 Start: 50759, Stop: 49965, Start Num: 33
Candidate Starts for Marleymoo_71:
(Start: 33 @50759 has 95 MA's), (Start: 35 @50675 has 1 MA's), (38, 50642), (39, 50597), (40, 50594), (43, 50552), (44, 50534), (48, 50510), (56, 50450), (59, 50426), (60, 50399), (62, 50381), (63, 50372), (70, 50039),

Gene: Melissauren88_52 Start: 37249, Stop: 38013, Start Num: 33
Candidate Starts for Melissauren88_52:
(25, 37090), (Start: 27 @37135 has 1 MA's), (Start: 33 @37249 has 95 MA's), (Start: 35 @37333 has 1 MA's), (40, 37414), (41, 37420), (44, 37474), (47, 37489), (53, 37540), (55, 37555), (61, 37609), (63, 37633), (66, 37660),

Gene: MiaZeal_106 Start: 58977, Stop: 59699, Start Num: 33
Candidate Starts for MiaZeal_106:
(Start: 33 @58977 has 95 MA's), (Start: 35 @59061 has 1 MA's), (36, 59067), (38, 59094), (40, 59142), (42, 59163), (43, 59184), (44, 59202), (46, 59211), (50, 59259), (51, 59262), (52, 59265), (54, 59274), (57, 59298), (59, 59310), (62, 59352), (63, 59361), (65, 59385), (72, 59688),

Gene: Michley_72 Start: 44145, Stop: 43537, Start Num: 32
Candidate Starts for Michley_72:
(Start: 32 @44145 has 2 MA's), (Start: 33 @44133 has 95 MA's), (34, 44061), (Start: 35 @44049 has 1 MA's), (40, 43968), (41, 43962), (44, 43908), (45, 43905), (47, 43893), (53, 43842), (55, 43827), (61, 43773), (63, 43749), (66, 43722),

Gene: MilanaBonita_45 Start: 33953, Stop: 34786, Start Num: 33
Candidate Starts for MilanaBonita_45:
(29, 33872), (Start: 33 @33953 has 95 MA's), (Start: 35 @34037 has 1 MA's), (40, 34118), (41, 34124), (44, 34178), (47, 34193), (53, 34244), (55, 34259), (61, 34313), (63, 34337), (66, 34364), (67, 34481), (69, 34622),

Gene: MilleniumForce_58 Start: 40147, Stop: 40875, Start Num: 33
Candidate Starts for MilleniumForce_58:
(29, 40066), (Start: 33 @40147 has 95 MA's), (Start: 35 @40231 has 1 MA's), (40, 40312), (41, 40318), (44, 40372), (47, 40387), (53, 40438), (55, 40453), (61, 40507), (63, 40531), (66, 40558),

Gene: MinionDave_53 Start: 37816, Stop: 38604, Start Num: 33
Candidate Starts for MinionDave_53:
(28, 37735), (Start: 33 @37816 has 95 MA's), (Start: 35 @37900 has 1 MA's), (36, 37906), (40, 37981), (41, 37987), (44, 38041), (47, 38056), (53, 38107), (55, 38122), (61, 38176), (63, 38200), (66, 38227),

Gene: Modragons_58 Start: 39883, Stop: 40710, Start Num: 33
Candidate Starts for Modragons_58:

(Start: 33 @39883 has 95 MA's), (Start: 35 @39967 has 1 MA's), (40, 40048), (41, 40054), (44, 40108), (45, 40111), (47, 40123), (50, 40165), (53, 40174), (55, 40189), (63, 40267),

Gene: Moonbeam_50 Start: 37207, Stop: 37923, Start Num: 33
Candidate Starts for Moonbeam_50:
(2, 36706), (5, 36742), (6, 36748), (11, 36808), (12, 36838), (22, 36949), (25, 37048), (Start: 27 @37093 has 1 MA's), (Start: 33 @37207 has 95 MA's), (Start: 35 @37291 has 1 MA's), (40, 37372), (41, 37378), (44, 37432), (47, 37447), (53, 37498), (55, 37513), (61, 37567), (63, 37591), (66, 37618), (73, 37891), (74, 37897),

Gene: Ms6_49 Start: 33004, Stop: 33744, Start Num: 33
Candidate Starts for Ms6_49:
(8, 32560), (12, 32635), (22, 32746), (25, 32845), (Start: 27 @32890 has 1 MA's), (Start: 33 @33004 has 95 MA's), (Start: 35 @33088 has 1 MA's), (40, 33169), (41, 33175), (44, 33229), (47, 33244), (53, 33295), (55, 33310), (61, 33364), (63, 33388), (66, 33415),

Gene: Mutaforma13_58 Start: 40291, Stop: 41163, Start Num: 33
Candidate Starts for Mutaforma13_58:
(29, 40210), (Start: 33 @40291 has 95 MA's), (Start: 35 @40375 has 1 MA's), (40, 40456), (41, 40462), (44, 40516), (47, 40531), (49, 40546), (50, 40573), (53, 40582), (55, 40597), (63, 40675), (64, 40693),

Gene: Nekros_109 Start: 61935, Stop: 62624, Start Num: 33
Candidate Starts for Nekros_109:
(Start: 33 @61935 has 95 MA's), (Start: 35 @62019 has 1 MA's), (36, 62025), (38, 62052), (40, 62100), (42, 62121), (43, 62142), (44, 62160), (46, 62169), (50, 62217), (51, 62220), (52, 62223), (54, 62232), (57, 62256), (59, 62268), (62, 62310), (63, 62319), (65, 62343), (72, 62613),

Gene: Nerujay_74 Start: 45950, Stop: 45162, Start Num: 31
Candidate Starts for Nerujay_74:
(Start: 31 @45950 has 1 MA's), (Start: 33 @45938 has 95 MA's), (Start: 35 @45854 has 1 MA's), (40, 45773), (41, 45767), (44, 45713), (47, 45698), (53, 45647), (55, 45632), (56, 45629), (63, 45554), (64, 45536),

Gene: Nibley_99 Start: 58356, Stop: 59090, Start Num: 33
Candidate Starts for Nibley_99:
(Start: 33 @58356 has 95 MA's), (Start: 35 @58440 has 1 MA's), (36, 58446), (38, 58473), (40, 58521), (42, 58542), (43, 58563), (44, 58581), (46, 58590), (50, 58638), (51, 58641), (52, 58644), (54, 58653), (57, 58677), (59, 58689), (62, 58731), (63, 58740), (65, 58764), (72, 59079),

Gene: Nichirin_58 Start: 39557, Stop: 40384, Start Num: 33
Candidate Starts for Nichirin_58:
(Start: 33 @39557 has 95 MA's), (Start: 35 @39641 has 1 MA's), (40, 39722), (41, 39728), (44, 39782), (45, 39785), (47, 39797), (50, 39839), (53, 39848), (55, 39863), (63, 39941),

Gene: Ochi17_57 Start: 39490, Stop: 40317, Start Num: 33
Candidate Starts for Ochi17_57:
(Start: 33 @39490 has 95 MA's), (Start: 35 @39574 has 1 MA's), (40, 39655), (41, 39661), (44, 39715), (45, 39718), (47, 39730), (50, 39772), (53, 39781), (55, 39796), (63, 39874),

Gene: Odette_112 Start: 63023, Stop: 63760, Start Num: 33
Candidate Starts for Odette_112:
(Start: 33 @63023 has 95 MA's), (Start: 35 @63107 has 1 MA's), (36, 63113), (38, 63140), (40, 63188), (42, 63209), (43, 63230), (44, 63248), (46, 63257), (50, 63305), (51, 63308), (52, 63311), (54, 63320),

(57, 63344), (59, 63356), (62, 63398), (63, 63407), (65, 63431), (72, 63752),

Gene: OfUltron_59 Start: 40039, Stop: 40866, Start Num: 33
Candidate Starts for OfUltron_59:
(Start: 33 @40039 has 95 MA's), (Start: 35 @40123 has 1 MA's), (40, 40204), (41, 40210), (44, 40264), (45, 40267), (47, 40279), (50, 40321), (53, 40330), (55, 40345), (63, 40423),

Gene: Okabe_49 Start: 34186, Stop: 34926, Start Num: 33
Candidate Starts for Okabe_49:
(23, 33952), (25, 34027), (Start: 27 @34072 has 1 MA's), (Start: 33 @34186 has 95 MA's), (Start: 35 @34270 has 1 MA's), (40, 34351), (41, 34357), (44, 34411), (47, 34426), (53, 34477), (55, 34492), (61, 34546), (63, 34570), (66, 34597),

Gene: Oksu_60 Start: 40242, Stop: 41129, Start Num: 33
Candidate Starts for Oksu_60:
(Start: 33 @40242 has 95 MA's), (Start: 35 @40326 has 1 MA's), (40, 40407), (41, 40413), (44, 40467), (45, 40470), (47, 40482), (50, 40524), (53, 40533), (55, 40548), (63, 40626),

Gene: Ovechkin_53 Start: 38019, Stop: 38765, Start Num: 33
Candidate Starts for Ovechkin_53:
(Start: 27 @37905 has 1 MA's), (Start: 33 @38019 has 95 MA's), (Start: 35 @38103 has 1 MA's), (40, 38184), (41, 38190), (44, 38244), (47, 38259), (53, 38310), (55, 38325), (61, 38379), (63, 38403), (66, 38430),

Gene: PMC_51 Start: 38126, Stop: 38875, Start Num: 33
Candidate Starts for PMC_51:
(Start: 33 @38126 has 95 MA's), (Start: 35 @38210 has 1 MA's), (36, 38216), (40, 38291), (41, 38297), (44, 38351), (46, 38360), (47, 38366), (53, 38417), (55, 38432), (56, 38435), (61, 38486), (63, 38510), (66, 38537),

Gene: Phanphagia_52 Start: 38231, Stop: 39055, Start Num: 33
Candidate Starts for Phanphagia_52:
(30, 38168), (Start: 33 @38231 has 95 MA's), (Start: 35 @38315 has 1 MA's), (40, 38396), (41, 38402), (44, 38456), (47, 38471), (53, 38522), (55, 38537), (61, 38591), (63, 38615), (66, 38642),

Gene: PhlipPhlop_54 Start: 39203, Stop: 39964, Start Num: 33
Candidate Starts for PhlipPhlop_54:
(Start: 33 @39203 has 95 MA's), (Start: 35 @39287 has 1 MA's), (36, 39293), (40, 39368), (41, 39374), (44, 39428), (46, 39437), (47, 39443), (53, 39494), (55, 39509), (56, 39512), (61, 39563), (63, 39587), (66, 39614),

Gene: Phoebus_111 Start: 64829, Stop: 65542, Start Num: 33
Candidate Starts for Phoebus_111:
(Start: 33 @64829 has 95 MA's), (Start: 35 @64913 has 1 MA's), (36, 64919), (38, 64946), (40, 64994), (42, 65015), (43, 65036), (44, 65054), (46, 65063), (50, 65111), (51, 65114), (52, 65117), (54, 65126), (57, 65150), (59, 65162), (62, 65204), (63, 65213), (65, 65237), (72, 65534),

Gene: Porcelain_104 Start: 58977, Stop: 59696, Start Num: 33
Candidate Starts for Porcelain_104:
(Start: 33 @58977 has 95 MA's), (Start: 35 @59061 has 1 MA's), (36, 59067), (38, 59094), (40, 59142), (42, 59163), (43, 59184), (44, 59202), (46, 59211), (50, 59259), (51, 59262), (52, 59265), (54, 59274), (57, 59298), (59, 59310), (62, 59352), (63, 59361), (65, 59385), (72, 59685),

Gene: Rearden_100 Start: 59155, Stop: 59901, Start Num: 33
Candidate Starts for Rearden_100:
(Start: 33 @59155 has 95 MA's), (Start: 35 @59239 has 1 MA's), (36, 59245), (38, 59272), (40, 59320), (42, 59341), (43, 59362), (44, 59380), (46, 59389), (50, 59437), (51, 59440), (52, 59443), (54, 59452), (57, 59476), (59, 59488), (62, 59530), (63, 59539), (65, 59563), (72, 59893),

Gene: Redno2_102 Start: 59684, Stop: 60403, Start Num: 33
Candidate Starts for Redno2_102:
(Start: 33 @59684 has 95 MA's), (Start: 35 @59768 has 1 MA's), (36, 59774), (38, 59801), (40, 59849), (42, 59870), (43, 59891), (44, 59909), (46, 59918), (50, 59966), (51, 59969), (52, 59972), (54, 59981), (57, 60005), (59, 60017), (62, 60059), (63, 60068), (65, 60092), (72, 60392),

Gene: Rockne_55 Start: 38126, Stop: 38887, Start Num: 33
Candidate Starts for Rockne_55:
(Start: 33 @38126 has 95 MA's), (Start: 35 @38210 has 1 MA's), (36, 38216), (40, 38291), (41, 38297), (44, 38351), (46, 38360), (47, 38366), (53, 38417), (55, 38432), (56, 38435), (61, 38486), (63, 38510), (66, 38537),

Gene: SG4_51 Start: 36961, Stop: 37761, Start Num: 33
Candidate Starts for SG4_51:
(28, 36880), (Start: 33 @36961 has 95 MA's), (Start: 35 @37045 has 1 MA's), (36, 37051), (40, 37126), (41, 37132), (44, 37186), (47, 37201), (53, 37252), (55, 37267), (61, 37321), (63, 37345), (66, 37372),

Gene: Sassafras_52 Start: 37067, Stop: 37849, Start Num: 33
Candidate Starts for Sassafras_52:
(Start: 33 @37067 has 95 MA's), (Start: 35 @37151 has 1 MA's), (36, 37157), (40, 37232), (41, 37238), (44, 37292), (47, 37307), (53, 37358), (55, 37373), (61, 37427), (63, 37451), (66, 37478),

Gene: Seabastian_59 Start: 40040, Stop: 40867, Start Num: 33
Candidate Starts for Seabastian_59:
(Start: 33 @40040 has 95 MA's), (Start: 35 @40124 has 1 MA's), (40, 40205), (41, 40211), (44, 40265), (45, 40268), (47, 40280), (50, 40322), (53, 40331), (55, 40346), (63, 40424),

Gene: Shaboozey_104 Start: 58800, Stop: 59534, Start Num: 33
Candidate Starts for Shaboozey_104:
(Start: 33 @58800 has 95 MA's), (Start: 35 @58884 has 1 MA's), (36, 58890), (38, 58917), (40, 58965), (42, 58986), (43, 59007), (44, 59025), (46, 59034), (50, 59082), (51, 59085), (52, 59088), (54, 59097), (57, 59121), (59, 59133), (62, 59175), (63, 59184), (65, 59208), (72, 59523),

Gene: Shauna1_53 Start: 38212, Stop: 38964, Start Num: 33
Candidate Starts for Shauna1_53:
(30, 38149), (Start: 33 @38212 has 95 MA's), (Start: 35 @38296 has 1 MA's), (40, 38377), (41, 38383), (44, 38437), (47, 38452), (53, 38503), (55, 38518), (61, 38572), (63, 38596), (66, 38623),

Gene: ShroomBoi_56 Start: 38456, Stop: 39220, Start Num: 33
Candidate Starts for ShroomBoi_56:
(29, 38375), (Start: 33 @38456 has 95 MA's), (Start: 35 @38540 has 1 MA's), (36, 38546), (40, 38621), (41, 38627), (44, 38681), (46, 38690), (47, 38696), (53, 38747), (55, 38762), (59, 38789), (61, 38816),

Gene: SilverChicken_64 Start: 37866, Stop: 38510, Start Num: 35
Candidate Starts for SilverChicken_64:
(Start: 33 @37782 has 95 MA's), (Start: 35 @37866 has 1 MA's), (37, 37875), (40, 37947), (41, 37953), (44, 38007), (47, 38022), (53, 38073), (55, 38088), (61, 38142), (63, 38166), (66, 38193), (73, 38478),

(74, 38484),

Gene: SimranZ1_54 Start: 37648, Stop: 38448, Start Num: 33
Candidate Starts for SimranZ1_54:
(26, 37519), (Start: 33 @37648 has 95 MA's), (Start: 35 @37732 has 1 MA's), (36, 37738), (40, 37813), (41, 37819), (44, 37873), (45, 37876), (46, 37882), (47, 37888), (53, 37939), (55, 37954), (58, 37978), (64, 38050), (71, 38428),

Gene: Soul22_58 Start: 38451, Stop: 39233, Start Num: 33
Candidate Starts for Soul22_58:
(Start: 33 @38451 has 95 MA's), (Start: 35 @38535 has 1 MA's), (40, 38616), (41, 38622), (44, 38676), (47, 38691), (53, 38742), (55, 38757), (61, 38811), (63, 38835), (66, 38862),

Gene: Spartacus_56 Start: 38115, Stop: 38927, Start Num: 33
Candidate Starts for Spartacus_56:
(30, 38052), (Start: 33 @38115 has 95 MA's), (Start: 35 @38199 has 1 MA's), (40, 38280), (41, 38286), (44, 38340), (47, 38355), (53, 38406), (55, 38421), (61, 38475), (63, 38499), (66, 38526),

Gene: Spikelee_61 Start: 39783, Stop: 40547, Start Num: 33
Candidate Starts for Spikelee_61:
(28, 39702), (Start: 33 @39783 has 95 MA's), (Start: 35 @39867 has 1 MA's), (40, 39948), (41, 39954), (44, 40008), (45, 40011), (47, 40023), (53, 40074), (55, 40089), (63, 40167), (66, 40194),

Gene: Squint_104 Start: 59096, Stop: 59818, Start Num: 33
Candidate Starts for Squint_104:
(Start: 33 @59096 has 95 MA's), (Start: 35 @59180 has 1 MA's), (36, 59186), (38, 59213), (40, 59261), (42, 59282), (43, 59303), (44, 59321), (46, 59330), (50, 59378), (51, 59381), (52, 59384), (54, 59393), (57, 59417), (59, 59429), (62, 59471), (63, 59480), (65, 59504), (72, 59807),

Gene: Squirty_57 Start: 38990, Stop: 39736, Start Num: 27
Candidate Starts for Squirty_57:
(Start: 27 @38990 has 1 MA's), (Start: 33 @39104 has 95 MA's), (Start: 35 @39188 has 1 MA's), (40, 39269), (41, 39275), (44, 39329), (47, 39344), (53, 39395), (55, 39410), (61, 39464), (63, 39488), (66, 39515),

Gene: StAnnes_53 Start: 38402, Stop: 39142, Start Num: 33
Candidate Starts for StAnnes_53:
(3, 37916), (4, 37925), (9, 37970), (10, 37982), (12, 38033), (13, 38039), (22, 38144), (25, 38243), (Start: 27 @38288 has 1 MA's), (Start: 33 @38402 has 95 MA's), (Start: 35 @38486 has 1 MA's), (40, 38567), (41, 38573), (44, 38627), (47, 38642), (53, 38693), (55, 38708), (61, 38762), (63, 38786), (66, 38813),

Gene: SuperGrey_58 Start: 39638, Stop: 40450, Start Num: 33
Candidate Starts for SuperGrey_58:
(30, 39575), (Start: 33 @39638 has 95 MA's), (Start: 35 @39722 has 1 MA's), (40, 39803), (41, 39809), (44, 39863), (47, 39878), (53, 39929), (55, 39944), (61, 39998), (63, 40022), (66, 40049),

Gene: Superphikiman_103 Start: 58187, Stop: 58909, Start Num: 33
Candidate Starts for Superphikiman_103:
(Start: 33 @58187 has 95 MA's), (Start: 35 @58271 has 1 MA's), (36, 58277), (38, 58304), (40, 58352), (42, 58373), (43, 58394), (44, 58412), (46, 58421), (50, 58469), (51, 58472), (52, 58475), (54, 58484), (57, 58508), (59, 58520), (62, 58562), (63, 58571), (65, 58595), (72, 58898),

Gene: TChen_54 Start: 38701, Stop: 39465, Start Num: 33
Candidate Starts for TChen_54:
(29, 38620), (Start: 33 @38701 has 95 MA's), (Start: 35 @38785 has 1 MA's), (40, 38866), (41, 38872), (44, 38926), (47, 38941), (49, 38956), (50, 38983), (53, 38992), (55, 39007), (63, 39085), (64, 39103),

Gene: Tchotchke_56 Start: 37497, Stop: 38369, Start Num: 33
Candidate Starts for Tchotchke_56:
(29, 37416), (Start: 33 @37497 has 95 MA's), (Start: 35 @37581 has 1 MA's), (40, 37662), (41, 37668), (44, 37722), (47, 37737), (53, 37788), (55, 37803), (61, 37857), (63, 37881), (66, 37908),

Gene: ThreeRngTarjay_107 Start: 64052, Stop: 64798, Start Num: 33
Candidate Starts for ThreeRngTarjay_107:
(Start: 33 @64052 has 95 MA's), (Start: 35 @64136 has 1 MA's), (36, 64142), (38, 64169), (40, 64217), (42, 64238), (43, 64259), (44, 64277), (46, 64286), (50, 64334), (51, 64337), (52, 64340), (54, 64349), (57, 64373), (59, 64385), (62, 64427), (63, 64436), (65, 64460), (72, 64790),

Gene: Topiatin_60 Start: 39703, Stop: 40527, Start Num: 33
Candidate Starts for Topiatin_60:
(Start: 33 @39703 has 95 MA's), (Start: 35 @39787 has 1 MA's), (40, 39868), (41, 39874), (44, 39928), (46, 39937), (47, 39943), (53, 39994), (55, 40009), (59, 40036), (61, 40063),

Gene: Wachhund_56 Start: 37784, Stop: 38566, Start Num: 33
Candidate Starts for Wachhund_56:
(16, 37469), (22, 37526), (25, 37625), (Start: 27 @37670 has 1 MA's), (Start: 33 @37784 has 95 MA's), (Start: 35 @37868 has 1 MA's), (40, 37949), (41, 37955), (44, 38009), (47, 38024), (53, 38075), (55, 38090), (61, 38144), (63, 38168), (66, 38195),

Gene: Wee_57 Start: 39390, Stop: 40094, Start Num: 33
Candidate Starts for Wee_57:
(Start: 33 @39390 has 95 MA's), (Start: 35 @39474 has 1 MA's), (40, 39555), (41, 39561), (44, 39615), (47, 39630), (53, 39681), (55, 39696), (61, 39750), (63, 39774), (66, 39801),

Gene: WillSterrel_55 Start: 39231, Stop: 40043, Start Num: 33
Candidate Starts for WillSterrel_55:
(30, 39168), (Start: 33 @39231 has 95 MA's), (Start: 35 @39315 has 1 MA's), (40, 39396), (41, 39402), (44, 39456), (47, 39471), (53, 39522), (55, 39537), (61, 39591), (63, 39615), (66, 39642),

Gene: XFactor_52 Start: 36735, Stop: 37475, Start Num: 33
Candidate Starts for XFactor_52:
(29, 36654), (Start: 33 @36735 has 95 MA's), (Start: 35 @36819 has 1 MA's), (40, 36900), (41, 36906), (44, 36960), (47, 36975), (53, 37026), (55, 37041), (61, 37095), (63, 37119), (66, 37146),

Gene: Zapner_67 Start: 39327, Stop: 40109, Start Num: 33
Candidate Starts for Zapner_67:
(Start: 33 @39327 has 95 MA's), (Start: 35 @39411 has 1 MA's), (40, 39492), (41, 39498), (44, 39552), (47, 39567), (53, 39618), (55, 39633), (61, 39687), (63, 39711), (66, 39738),

Gene: Zelink_106 Start: 64032, Stop: 64745, Start Num: 33
Candidate Starts for Zelink_106:
(Start: 33 @64032 has 95 MA's), (Start: 35 @64116 has 1 MA's), (36, 64122), (38, 64149), (40, 64197), (42, 64218), (43, 64239), (44, 64257), (46, 64266), (50, 64314), (51, 64317), (52, 64320), (54, 64329), (57, 64353), (59, 64365), (62, 64407), (63, 64416), (65, 64440), (72, 64737),