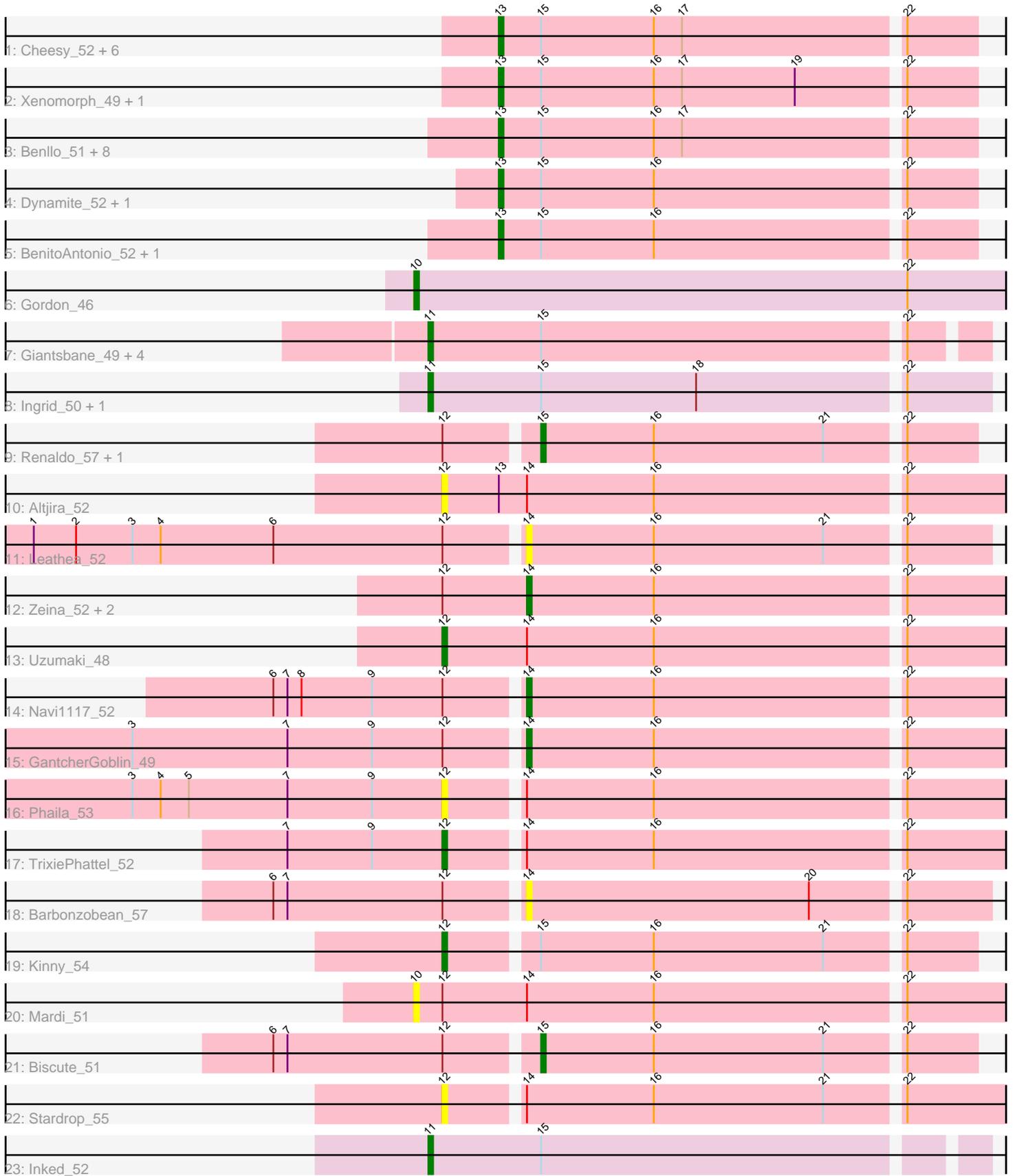# Pham 291268

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 291268 Report

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

Pham number 291268 has 48 members, 9 are drafts.

Phages represented in each track:
• Track 1 : Cheesy_52, Correa_50, Bowling_52, Elsa_52, Arcadia_52, Nason_52, YoshiYama_52
• Track 2 : Xenomorph_49, Tribby_53
• Track 3 : Benllo_51, JEGGS_51, Hankly_51, Heisenberger_51, Circum_54, Mudcat_49, KeaneyLin_51, Mooshroom_54, GoCrazy_51
• Track 4 : Dynamite_52, NapoleonB_52
• Track 5 : BenitoAntonio_52, Kardesai_53
• Track 6 : Gordon_46
• Track 7 : Giantsbane_49, Bouchard_48, Chlochlo_49, Shepard_51, Tipton_50
• Track 8 : Ingrid_50, Loretta_50
• Track 9 : Renaldo_57, Lewando_54
• Track 10 : Altjira_52
• Track 11 : Leathea_52
• Track 12 : Zeina_52, KevinMinion_50, Argan_49
• Track 13 : Uzumaki_48
• Track 14 : Navi1117_52
• Track 15 : GantcherGoblin_49
• Track 16 : Phaila_53
• Track 17 : TrixiePhattel_52
• Track 18 : Barbonzobean_57
• Track 19 : Kinny_54
• Track 20 : Mardi_51
• Track 21 : Biscute_51
• Track 22 : Stardrop_55
• Track 23 : Inked_52

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

The start number called the most often in the published annotations is 13, it was called in 21 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arcadia_52, BenitoAntonio_52, Benllo_51, Bowling_52, Cheesy_52, Circum_54, Correa_50, Dynamite_52, Elsa_52, GoCrazy_51, Hankly_51, Heisenberger_51,

JEGGS_51, Kardesai_53, KeaneyLin_51, Mooshroom_54, Mudcat_49, NapoleonB_52, Nason_52, Tribby_53, Xenomorph_49, YoshiYama_52,

Genes that have the "Most Annotated" start but do not call it:
• Altjira_52,

Genes that do not have the "Most Annotated" start:
• Argan_49, Barbonzobean_57, Biscute_51, Bouchard_48, Chlochlo_49, GantcherGoblin_49, Giantsbane_49, Gordon_46, Ingrid_50, Inked_52, KevinMinion_50, Kinny_54, Leathea_52, Lewando_54, Loretta_50, Mardi_51, Navi1117_52, Phaila_53, Renaldo_57, Shepard_51, Stardrop_55, Tipton_50, TrixiePhattel_52, Uzumaki_48, Zeina_52,

Summary by start number:

Start 10:
• Found in 2 of 48 (4.2%) of genes in pham
• Manual Annotations of this start: 1 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gordon_46 (AU1), Mardi_51 (AU6),

Start 11:
• Found in 8 of 48 (16.7%) of genes in pham
• Manual Annotations of this start: 7 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bouchard_48 (AU2), Chlochlo_49 (AU2), Giantsbane_49 (AU2), Ingrid_50 (AU3), Inked_52 (AU7), Loretta_50 (AU3), Shepard_51 (AU2), Tipton_50 (AU2),

Start 12:
• Found in 17 of 48 (35.4%) of genes in pham
• Manual Annotations of this start: 3 of 39
• Called 35.3% of time when present
• Phage (with cluster) where this start called: Altjira_52 (AU6), Kinny_54 (AU6), Phaila_53 (AU6), Stardrop_55 (AU6), TrixiePhattel_52 (AU6), Uzumaki_48 (AU6),

Start 13:
• Found in 23 of 48 (47.9%) of genes in pham
• Manual Annotations of this start: 21 of 39
• Called 95.7% of time when present
• Phage (with cluster) where this start called: Arcadia_52 (AM), BenitoAntonio_52 (AM), Benllo_51 (AM), Bowling_52 (AM), Cheesy_52 (AM), Circum_54 (AM), Correa_50 (AM), Dynamite_52 (AM), Elsa_52 (AM), GoCrazy_51 (AM), Hankly_51 (AM), Heisenberger_51 (AM), JEGGS_51 (AM), Kardesai_53 (AM), KeaneyLin_51 (AM), Mooshroom_54 (AM), Mudcat_49 (AM), NapoleonB_52 (AM), Nason_52 (AM), Tribby_53 (AM), Xenomorph_49 (AM), YoshiYama_52 (AM),

Start 14:
• Found in 13 of 48 (27.1%) of genes in pham
• Manual Annotations of this start: 5 of 39
• Called 53.8% of time when present
• Phage (with cluster) where this start called: Argan_49 (AU6), Barbonzobean_57 (AU6), GantcherGoblin_49 (AU6), KevinMinion_50 (AU6), Leathea_52 (AU6),

Navi1117_52 (AU6), Zeina_52 (AU6),

Start 15:
• Found in 34 of 48 (70.8%) of genes in pham
• Manual Annotations of this start: 2 of 39
• Called 8.8% of time when present
• Phage (with cluster) where this start called: Biscute_51 (AU6), Lewando_54 (AU6), Renaldo_57 (AU6),

Summary by clusters:

There are 6 clusters represented in this pham: AM, AU1, AU3, AU2, AU7, AU6,

Info for manual annotations of cluster AM:
•Start number 13 was manually annotated 21 times for cluster AM.

Info for manual annotations of cluster AU1:
•Start number 10 was manually annotated 1 time for cluster AU1.

Info for manual annotations of cluster AU2:
•Start number 11 was manually annotated 4 times for cluster AU2.

Info for manual annotations of cluster AU3:
•Start number 11 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU6:
•Start number 12 was manually annotated 3 times for cluster AU6.
•Start number 14 was manually annotated 5 times for cluster AU6.
•Start number 15 was manually annotated 2 times for cluster AU6.

Info for manual annotations of cluster AU7:
•Start number 11 was manually annotated 1 time for cluster AU7.

Gene Information:

Gene: Altjira_52 Start: 34529, Stop: 34645, Start Num: 12
Candidate Starts for Altjira_52:
(Start: 12 @34529 has 3 MA's), (Start: 13 @34541 has 21 MA's), (Start: 14 @34547 has 5 MA's), (16, 34574), (22, 34625),

Gene: Arcadia_52 Start: 33235, Stop: 33333, Start Num: 13
Candidate Starts for Arcadia_52:
(Start: 13 @33235 has 21 MA's), (Start: 15 @33244 has 2 MA's), (16, 33268), (17, 33274), (22, 33319),

Gene: Argan_49 Start: 33254, Stop: 33352, Start Num: 14
Candidate Starts for Argan_49:
(Start: 12 @33236 has 3 MA's), (Start: 14 @33254 has 5 MA's), (16, 33281), (22, 33332),

Gene: Barbonzobean_57 Start: 35258, Stop: 35353, Start Num: 14
Candidate Starts for Barbonzobean_57:

(6, 35207), (7, 35210), (Start: 12 @35243 has 3 MA's), (Start: 14 @35258 has 5 MA's), (20, 35318), (22, 35336),

Gene: BenitoAntonio_52 Start: 32772, Stop: 32870, Start Num: 13
Candidate Starts for BenitoAntonio_52:
(Start: 13 @32772 has 21 MA's), (Start: 15 @32781 has 2 MA's), (16, 32805), (22, 32856),

Gene: Benllo_51 Start: 33450, Stop: 33548, Start Num: 13
Candidate Starts for Benllo_51:
(Start: 13 @33450 has 21 MA's), (Start: 15 @33459 has 2 MA's), (16, 33483), (17, 33489), (22, 33534),

Gene: Biscute_51 Start: 34653, Stop: 34742, Start Num: 15
Candidate Starts for Biscute_51:
(6, 34599), (7, 34602), (Start: 12 @34635 has 3 MA's), (Start: 15 @34653 has 2 MA's), (16, 34677), (21, 34713), (22, 34728),

Gene: Bouchard_48 Start: 34781, Stop: 34894, Start Num: 11
Candidate Starts for Bouchard_48:
(Start: 11 @34781 has 7 MA's), (Start: 15 @34805 has 2 MA's), (22, 34880),

Gene: Bowling_52 Start: 32980, Stop: 33078, Start Num: 13
Candidate Starts for Bowling_52:
(Start: 13 @32980 has 21 MA's), (Start: 15 @32989 has 2 MA's), (16, 33013), (17, 33019), (22, 33064),

Gene: Cheesy_52 Start: 32956, Stop: 33054, Start Num: 13
Candidate Starts for Cheesy_52:
(Start: 13 @32956 has 21 MA's), (Start: 15 @32965 has 2 MA's), (16, 32989), (17, 32995), (22, 33040),

Gene: Chlochlo_49 Start: 34525, Stop: 34638, Start Num: 11
Candidate Starts for Chlochlo_49:
(Start: 11 @34525 has 7 MA's), (Start: 15 @34549 has 2 MA's), (22, 34624),

Gene: Circum_54 Start: 33641, Stop: 33739, Start Num: 13
Candidate Starts for Circum_54:
(Start: 13 @33641 has 21 MA's), (Start: 15 @33650 has 2 MA's), (16, 33674), (17, 33680), (22, 33725),

Gene: Correa_50 Start: 32102, Stop: 32200, Start Num: 13
Candidate Starts for Correa_50:
(Start: 13 @32102 has 21 MA's), (Start: 15 @32111 has 2 MA's), (16, 32135), (17, 32141), (22, 32186),

Gene: Dynamite_52 Start: 33165, Stop: 33263, Start Num: 13
Candidate Starts for Dynamite_52:
(Start: 13 @33165 has 21 MA's), (Start: 15 @33174 has 2 MA's), (16, 33198), (22, 33249),

Gene: Elsa_52 Start: 33235, Stop: 33333, Start Num: 13
Candidate Starts for Elsa_52:
(Start: 13 @33235 has 21 MA's), (Start: 15 @33244 has 2 MA's), (16, 33268), (17, 33274), (22, 33319),

Gene: GantcherGoblin_49 Start: 33332, Stop: 33430, Start Num: 14
Candidate Starts for GantcherGoblin_49:
(3, 33251), (7, 33284), (9, 33302), (Start: 12 @33317 has 3 MA's), (Start: 14 @33332 has 5 MA's), (16, 33359), (22, 33410),

Gene: Giantsbane_49 Start: 33708, Stop: 33821, Start Num: 11
Candidate Starts for Giantsbane_49:
(Start: 11 @33708 has 7 MA's), (Start: 15 @33732 has 2 MA's), (22, 33807),

Gene: GoCrazy_51 Start: 33106, Stop: 33204, Start Num: 13
Candidate Starts for GoCrazy_51:
(Start: 13 @33106 has 21 MA's), (Start: 15 @33115 has 2 MA's), (16, 33139), (17, 33145), (22, 33190),

Gene: Gordon_46 Start: 35478, Stop: 35603, Start Num: 10
Candidate Starts for Gordon_46:
(Start: 10 @35478 has 1 MA's), (22, 35583),

Gene: Hankly_51 Start: 32380, Stop: 32478, Start Num: 13
Candidate Starts for Hankly_51:
(Start: 13 @32380 has 21 MA's), (Start: 15 @32389 has 2 MA's), (16, 32413), (17, 32419), (22, 32464),

Gene: Heisenberger_51 Start: 32661, Stop: 32759, Start Num: 13
Candidate Starts for Heisenberger_51:
(Start: 13 @32661 has 21 MA's), (Start: 15 @32670 has 2 MA's), (16, 32694), (17, 32700), (22, 32745),

Gene: Ingrid_50 Start: 34682, Stop: 34798, Start Num: 11
Candidate Starts for Ingrid_50:
(Start: 11 @34682 has 7 MA's), (Start: 15 @34706 has 2 MA's), (18, 34739), (22, 34781),

Gene: Inked_52 Start: 35810, Stop: 35923, Start Num: 11
Candidate Starts for Inked_52:
(Start: 11 @35810 has 7 MA's), (Start: 15 @35834 has 2 MA's),

Gene: JEGGS_51 Start: 32716, Stop: 32814, Start Num: 13
Candidate Starts for JEGGS_51:
(Start: 13 @32716 has 21 MA's), (Start: 15 @32725 has 2 MA's), (16, 32749), (17, 32755), (22, 32800),

Gene: Kardesai_53 Start: 33350, Stop: 33448, Start Num: 13
Candidate Starts for Kardesai_53:
(Start: 13 @33350 has 21 MA's), (Start: 15 @33359 has 2 MA's), (16, 33383), (22, 33434),

Gene: KeaneyLin_51 Start: 33106, Stop: 33204, Start Num: 13
Candidate Starts for KeaneyLin_51:
(Start: 13 @33106 has 21 MA's), (Start: 15 @33115 has 2 MA's), (16, 33139), (17, 33145), (22, 33190),

Gene: KevinMinion_50 Start: 34205, Stop: 34303, Start Num: 14
Candidate Starts for KevinMinion_50:
(Start: 12 @34187 has 3 MA's), (Start: 14 @34205 has 5 MA's), (16, 34232), (22, 34283),

Gene: Kinny_54 Start: 35478, Stop: 35585, Start Num: 12
Candidate Starts for Kinny_54:
(Start: 12 @35478 has 3 MA's), (Start: 15 @35496 has 2 MA's), (16, 35520), (21, 35556), (22, 35571),

Gene: Leathea_52 Start: 33428, Stop: 33523, Start Num: 14
Candidate Starts for Leathea_52:
(1, 33326), (2, 33335), (3, 33347), (4, 33353), (6, 33377), (Start: 12 @33413 has 3 MA's), (Start: 14 @33428 has 5 MA's), (16, 33455), (21, 33491), (22, 33506),

Gene: Lewando_54 Start: 35003, Stop: 35092, Start Num: 15
Candidate Starts for Lewando_54:
(Start: 12 @34985 has 3 MA's), (Start: 15 @35003 has 2 MA's), (16, 35027), (21, 35063), (22, 35078),

Gene: Loretta_50 Start: 34682, Stop: 34798, Start Num: 11
Candidate Starts for Loretta_50:
(Start: 11 @34682 has 7 MA's), (Start: 15 @34706 has 2 MA's), (18, 34739), (22, 34781),

Gene: Mardi_51 Start: 33756, Stop: 33878, Start Num: 10
Candidate Starts for Mardi_51:
(Start: 10 @33756 has 1 MA's), (Start: 12 @33762 has 3 MA's), (Start: 14 @33780 has 5 MA's), (16, 33807), (22, 33858),

Gene: Mooshroom_54 Start: 33350, Stop: 33448, Start Num: 13
Candidate Starts for Mooshroom_54:
(Start: 13 @33350 has 21 MA's), (Start: 15 @33359 has 2 MA's), (16, 33383), (17, 33389), (22, 33434),

Gene: Mudcat_49 Start: 34074, Stop: 34172, Start Num: 13
Candidate Starts for Mudcat_49:
(Start: 13 @34074 has 21 MA's), (Start: 15 @34083 has 2 MA's), (16, 34107), (17, 34113), (22, 34158),

Gene: NapoleonB_52 Start: 33165, Stop: 33263, Start Num: 13
Candidate Starts for NapoleonB_52:
(Start: 13 @33165 has 21 MA's), (Start: 15 @33174 has 2 MA's), (16, 33198), (22, 33249),

Gene: Nason_52 Start: 33235, Stop: 33333, Start Num: 13
Candidate Starts for Nason_52:
(Start: 13 @33235 has 21 MA's), (Start: 15 @33244 has 2 MA's), (16, 33268), (17, 33274), (22, 33319),

Gene: Navi1117_52 Start: 34044, Stop: 34142, Start Num: 14
Candidate Starts for Navi1117_52:
(6, 33993), (7, 33996), (8, 33999), (9, 34014), (Start: 12 @34029 has 3 MA's), (Start: 14 @34044 has 5 MA's), (16, 34071), (22, 34122),

Gene: Phaila_53 Start: 33410, Stop: 33523, Start Num: 12
Candidate Starts for Phaila_53:
(3, 33344), (4, 33350), (5, 33356), (7, 33377), (9, 33395), (Start: 12 @33410 has 3 MA's), (Start: 14 @33425 has 5 MA's), (16, 33452), (22, 33503),

Gene: Renaldo_57 Start: 35312, Stop: 35401, Start Num: 15
Candidate Starts for Renaldo_57:
(Start: 12 @35294 has 3 MA's), (Start: 15 @35312 has 2 MA's), (16, 35336), (21, 35372), (22, 35387),

Gene: Shepard_51 Start: 34739, Stop: 34852, Start Num: 11
Candidate Starts for Shepard_51:
(Start: 11 @34739 has 7 MA's), (Start: 15 @34763 has 2 MA's), (22, 34838),

Gene: Stardrop_55 Start: 34034, Stop: 34147, Start Num: 12
Candidate Starts for Stardrop_55:
(Start: 12 @34034 has 3 MA's), (Start: 14 @34049 has 5 MA's), (16, 34076), (21, 34112), (22, 34127),

Gene: Tipton_50 Start: 35184, Stop: 35297, Start Num: 11
Candidate Starts for Tipton_50:

(Start: 11 @35184 has 7 MA's), (Start: 15 @35208 has 2 MA's), (22, 35283),

Gene: Tribby_53 Start: 33173, Stop: 33274, Start Num: 13
Candidate Starts for Tribby_53:
(Start: 13 @33173 has 21 MA's), (Start: 15 @33182 has 2 MA's), (16, 33206), (17, 33212), (19, 33236), (22, 33257),

Gene: TrixiePhattel_52 Start: 33437, Stop: 33550, Start Num: 12
Candidate Starts for TrixiePhattel_52:
(7, 33404), (9, 33422), (Start: 12 @33437 has 3 MA's), (Start: 14 @33452 has 5 MA's), (16, 33479), (22, 33530),

Gene: Uzumaki_48 Start: 33429, Stop: 33545, Start Num: 12
Candidate Starts for Uzumaki_48:
(Start: 12 @33429 has 3 MA's), (Start: 14 @33447 has 5 MA's), (16, 33474), (22, 33525),

Gene: Xenomorph_49 Start: 32906, Stop: 33004, Start Num: 13
Candidate Starts for Xenomorph_49:
(Start: 13 @32906 has 21 MA's), (Start: 15 @32915 has 2 MA's), (16, 32939), (17, 32945), (19, 32969), (22, 32990),

Gene: YoshiYama_52 Start: 33230, Stop: 33328, Start Num: 13
Candidate Starts for YoshiYama_52:
(Start: 13 @33230 has 21 MA's), (Start: 15 @33239 has 2 MA's), (16, 33263), (17, 33269), (22, 33314),

Gene: Zeina_52 Start: 33997, Stop: 34095, Start Num: 14
Candidate Starts for Zeina_52:
(Start: 12 @33979 has 3 MA's), (Start: 14 @33997 has 5 MA's), (16, 34024), (22, 34075),