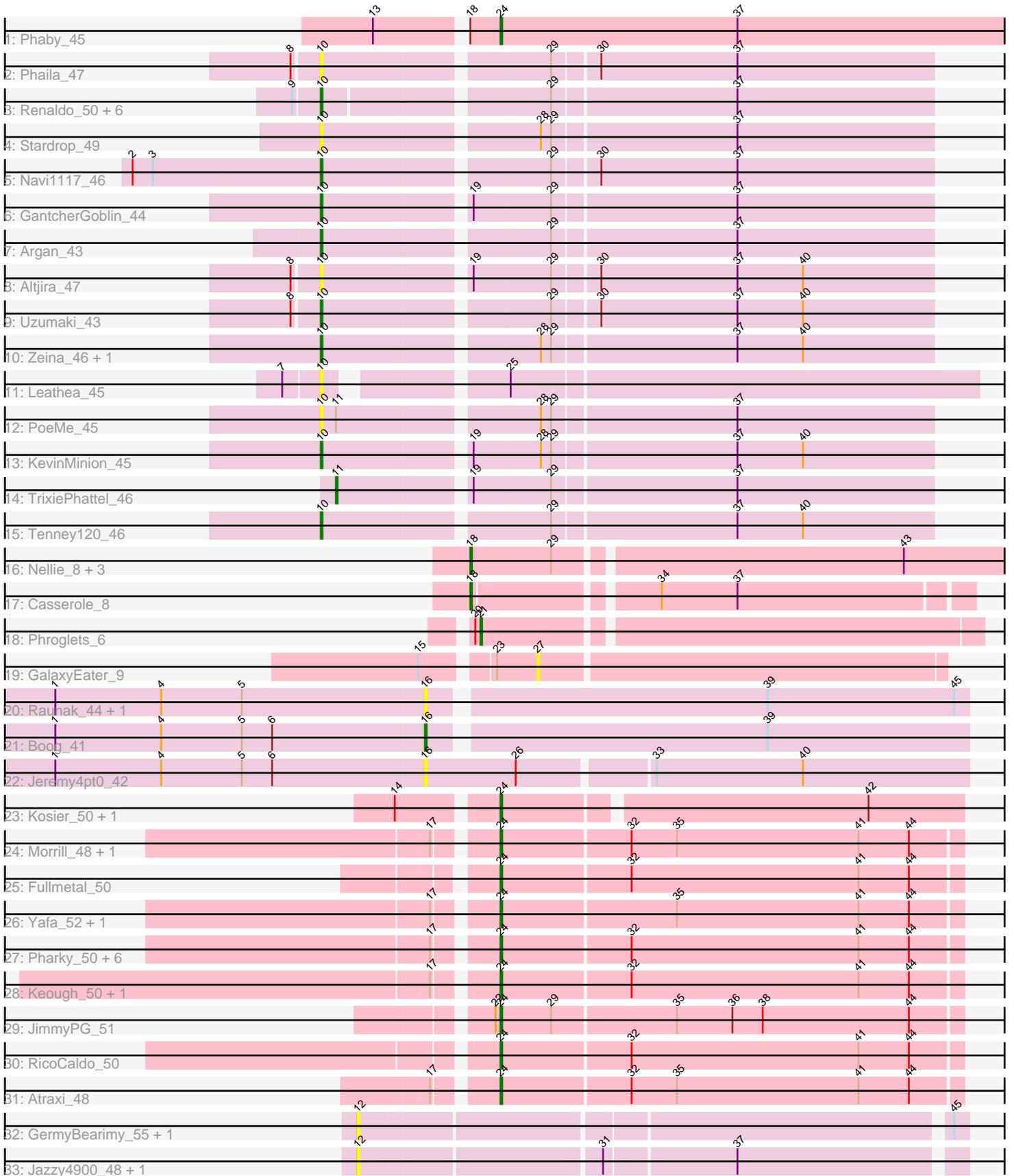# Pham 291207

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 291207 Report

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

Pham number 291207 has 56 members, 21 are drafts.

Phages represented in each track:
• Track 1 : Phaby_45
• Track 2 : Phaila_47
• Track 3 : Renaldo_50, Muglass_47, Kinny_48, BarbieDoll_49, Biscute_45, Barbonzobean_50, Lewando_47
• Track 4 : Stardrop_49
• Track 5 : Navi1117_46
• Track 6 : GantcherGoblin_44
• Track 7 : Argan_43
• Track 8 : Altjira_47
• Track 9 : Uzumaki_43
• Track 10 : Zeina_46, Mardi_45
• Track 11 : Leathea_45
• Track 12 : PoeMe_45
• Track 13 : KevinMinion_45
• Track 14 : TrixiePhattel_46
• Track 15 : Tenney120_46
• Track 16 : Nellie_8, Brad_8, GurgleFerb_8, Adat_8
• Track 17 : Casserole_8
• Track 18 : Phroglets_6
• Track 19 : GalaxyEater_9
• Track 20 : Raunak_44, Spain_44
• Track 21 : Boog_41
• Track 22 : Jeremy4pt0_42
• Track 23 : Kosier_50, Fede_50
• Track 24 : Morrill_48, ThirteenKH_52
• Track 25 : Fullmetal_50
• Track 26 : Yafa_52, TrippleS_50
• Track 27 : Pharky_50, Phedro_50, StagePhright_50, Moleficent_51, Astartes_51, Phractured_50, PhriedRice_51
• Track 28 : Keough_50, Mazun_51
• Track 29 : JimmyPG_51
• Track 30 : RicoCaldo_50
• Track 31 : Atraxi_48
• Track 32 : GermyBearimy_55, Arzan_49
• Track 33 : Jazzy4900_48, Sunny4976_47

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

The start number called the most often in the published annotations is 24, it was called in 17 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Astartes_51, Atraxi_48, Fede_50, Fullmetal_50, JimmyPG_51, Keough_50, Kosier_50, Mazun_51, Moleficent_51, Morrill_48, Phaby_45, Pharky_50, Phedro_50, Phractured_50, PhriedRice_51, RicoCaldo_50, StagePhright_50, ThirteenKH_52, TrippleS_50, Yafa_52,

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

Genes that do not have the "Most Annotated" start:
• Adat_8, Altjira_47, Argan_43, Arzan_49, BarbieDoll_49, Barbonzobean_50, Biscute_45, Boog_41, Brad_8, Casserole_8, GalaxyEater_9, GantcherGoblin_44, GermyBearimy_55, GurgleFerb_8, Jazzy4900_48, Jeremy4pt0_42, KevinMinion_45, Kinny_48, Leathea_45, Lewando_47, Mardi_45, Muglass_47, Navi1117_46, Nellie_8, Phaila_47, Phroglets_6, PoeMe_45, Raunak_44, Renaldo_50, Spain_44, Stardrop_49, Sunny4976_47, Tenney120_46, TrixiePhattel_46, Uzumaki_43, Zeina_46,

Summary by start number:

Start 10:
• Found in 20 of 56 (35.7%) of genes in pham
• Manual Annotations of this start: 10 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Altjira_47 (AU6), Argan_43 (AU6), BarbieDoll_49 (AU6), Barbonzobean_50 (AU6), Biscute_45 (AU6), GantcherGoblin_44 (AU6), KevinMinion_45 (AU6), Kinny_48 (AU6), Leathea_45 (AU6), Lewando_47 (AU6), Mardi_45 (AU6), Muglass_47 (AU6), Navi1117_46 (AU6), Phaila_47 (AU6), PoeMe_45 (AU6), Renaldo_50 (AU6), Stardrop_49 (AU6), Tenney120_46 (AU6), Uzumaki_43 (AU6), Zeina_46 (AU6),

Start 11:
• Found in 2 of 56 (3.6%) of genes in pham
• Manual Annotations of this start: 1 of 35
• Called 50.0% of time when present
• Phage (with cluster) where this start called: TrixiePhattel_46 (AU6),

Start 12:
• Found in 4 of 56 (7.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arzan_49 (FI), GermyBearimy_55 (FI), Jazzy4900_48 (FI), Sunny4976_47 (FI),

Start 16:
• Found in 4 of 56 (7.1%) of genes in pham
• Manual Annotations of this start: 1 of 35

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Boog_41 (AW), Jeremy4pt0_42 (AW), Raunak_44 (AW), Spain_44 (AW),

Start 18:
• Found in 6 of 56 (10.7%) of genes in pham
• Manual Annotations of this start: 5 of 35
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Adat_8 (AV), Brad_8 (AV), Casserole_8 (AV), GurgleFerb_8 (AV), Nellie_8 (AV),

Start 21:
• Found in 1 of 56 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phroglets_6 (AV),

Start 24:
• Found in 20 of 56 (35.7%) of genes in pham
• Manual Annotations of this start: 17 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Astartes_51 (EK2), Atraxi_48 (EK2), Fede_50 (EK2), Fullmetal_50 (EK2), JimmyPG_51 (EK2), Keough_50 (EK2), Kosier_50 (EK2), Mazun_51 (EK2), Moleficent_51 (EK2), Morrill_48 (EK2), Phaby_45 (AU2), Pharky_50 (EK2), Phedro_50 (EK2), Phractured_50 (EK2), PhriedRice_51 (EK2), RicoCaldo_50 (EK2), StagePhright_50 (EK2), ThirteenKH_52 (EK2), TrippleS_50 (EK2), Yafa_52 (EK2),

Start 27:
• Found in 1 of 56 (1.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GalaxyEater_9 (AV),

Summary by clusters:

There are 6 clusters represented in this pham: AV, AU2, AW, AU6, FI, EK2,

Info for manual annotations of cluster AU2:
•Start number 24 was manually annotated 1 time for cluster AU2.

Info for manual annotations of cluster AU6:
•Start number 10 was manually annotated 10 times for cluster AU6.
•Start number 11 was manually annotated 1 time for cluster AU6.

Info for manual annotations of cluster AV:
•Start number 18 was manually annotated 5 times for cluster AV.
•Start number 21 was manually annotated 1 time for cluster AV.

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

Info for manual annotations of cluster EK2:

•Start number 24 was manually annotated 16 times for cluster EK2.

Gene Information:

Gene: Adat_8 Start: 4006, Stop: 4347, Start Num: 18
Candidate Starts for Adat_8:
(Start: 18 @4006 has 5 MA's), (29, 4054), (43, 4252),

Gene: Altjira_47 Start: 32911, Stop: 33258, Start Num: 10
Candidate Starts for Altjira_47:
(8, 32896), (Start: 10 @32911 has 10 MA's), (19, 32992), (29, 33037), (30, 33061), (37, 33142), (40, 33181),

Gene: Argan_43 Start: 31213, Stop: 31560, Start Num: 10
Candidate Starts for Argan_43:
(Start: 10 @31213 has 10 MA's), (29, 31339), (37, 31444),

Gene: Arzan_49 Start: 32711, Stop: 33049, Start Num: 12
Candidate Starts for Arzan_49:
(12, 32711), (45, 33041),

Gene: Astartes_51 Start: 50802, Stop: 51071, Start Num: 24
Candidate Starts for Astartes_51:
(17, 50772), (Start: 24 @50802 has 17 MA's), (32, 50877), (41, 51012), (44, 51042),

Gene: Atraxi_48 Start: 50596, Stop: 50865, Start Num: 24
Candidate Starts for Atraxi_48:
(17, 50566), (Start: 24 @50596 has 17 MA's), (32, 50671), (35, 50698), (41, 50806), (44, 50836),

Gene: BarbieDoll_49 Start: 33215, Stop: 33559, Start Num: 10
Candidate Starts for BarbieDoll_49:
(9, 33200), (Start: 10 @33215 has 10 MA's), (29, 33338), (37, 33443),

Gene: Barbonzobean_50 Start: 33259, Stop: 33603, Start Num: 10
Candidate Starts for Barbonzobean_50:
(9, 33244), (Start: 10 @33259 has 10 MA's), (29, 33382), (37, 33487),

Gene: Biscute_45 Start: 32867, Stop: 33211, Start Num: 10
Candidate Starts for Biscute_45:
(9, 32852), (Start: 10 @32867 has 10 MA's), (29, 32990), (37, 33095),

Gene: Boog_41 Start: 30265, Stop: 30576, Start Num: 16
Candidate Starts for Boog_41:
(1, 30046), (4, 30109), (5, 30157), (6, 30175), (Start: 16 @30265 has 1 MA's), (39, 30457),

Gene: Brad_8 Start: 4004, Stop: 4345, Start Num: 18
Candidate Starts for Brad_8:
(Start: 18 @4004 has 5 MA's), (29, 4052), (43, 4250),

Gene: Casserole_8 Start: 4130, Stop: 4408, Start Num: 18

Candidate Starts for Casserole_8:
(Start: 18 @4130 has 5 MA's), (34, 4229), (37, 4274),

Gene: Fede_50 Start: 51739, Stop: 52002, Start Num: 24
Candidate Starts for Fede_50:
(14, 51688), (Start: 24 @51739 has 17 MA's), (42, 51946),

Gene: Fullmetal_50 Start: 51136, Stop: 51405, Start Num: 24
Candidate Starts for Fullmetal_50:
(Start: 24 @51136 has 17 MA's), (32, 51211), (41, 51346), (44, 51376),

Gene: GalaxyEater_9 Start: 4729, Stop: 4965, Start Num: 27
Candidate Starts for GalaxyEater_9:
(15, 4669), (23, 4705), (27, 4729),

Gene: GantcherGoblin_44 Start: 31712, Stop: 32059, Start Num: 10
Candidate Starts for GantcherGoblin_44:
(Start: 10 @31712 has 10 MA's), (19, 31793), (29, 31838), (37, 31943),

Gene: GermyBearimy_55 Start: 34055, Stop: 34393, Start Num: 12
Candidate Starts for GermyBearimy_55:
(12, 34055), (45, 34385),

Gene: GurgleFerb_8 Start: 4005, Stop: 4346, Start Num: 18
Candidate Starts for GurgleFerb_8:
(Start: 18 @4005 has 5 MA's), (29, 4053), (43, 4251),

Gene: Jazzy4900_48 Start: 33511, Stop: 33849, Start Num: 12
Candidate Starts for Jazzy4900_48:
(12, 33511), (31, 33646), (37, 33721),

Gene: Jeremy4pt0_42 Start: 30259, Stop: 30573, Start Num: 16
Candidate Starts for Jeremy4pt0_42:
(1, 30040), (4, 30103), (5, 30151), (6, 30169), (Start: 16 @30259 has 1 MA's), (26, 30313), (33, 30388), (40, 30475),

Gene: JimmyPG_51 Start: 51514, Stop: 51783, Start Num: 24
Candidate Starts for JimmyPG_51:
(22, 51511), (Start: 24 @51514 has 17 MA's), (29, 51544), (35, 51616), (36, 51649), (38, 51667), (44, 51754),

Gene: Keough_50 Start: 50933, Stop: 51202, Start Num: 24
Candidate Starts for Keough_50:
(17, 50903), (Start: 24 @50933 has 17 MA's), (32, 51008), (41, 51143), (44, 51173),

Gene: KevinMinion_45 Start: 32466, Stop: 32813, Start Num: 10
Candidate Starts for KevinMinion_45:
(Start: 10 @32466 has 10 MA's), (19, 32547), (28, 32586), (29, 32592), (37, 32697), (40, 32736),

Gene: Kinny_48 Start: 33709, Stop: 34053, Start Num: 10
Candidate Starts for Kinny_48:
(9, 33694), (Start: 10 @33709 has 10 MA's), (29, 33832), (37, 33937),

Gene: Kosier_50 Start: 51683, Stop: 51946, Start Num: 24
Candidate Starts for Kosier_50:
(14, 51632), (Start: 24 @51683 has 17 MA's), (42, 51890),

Gene: Leathea_45 Start: 31388, Stop: 31747, Start Num: 10
Candidate Starts for Leathea_45:
(7, 31367), (Start: 10 @31388 has 10 MA's), (25, 31475),

Gene: Lewando_47 Start: 33001, Stop: 33345, Start Num: 10
Candidate Starts for Lewando_47:
(9, 32986), (Start: 10 @33001 has 10 MA's), (29, 33124), (37, 33229),

Gene: Mardi_45 Start: 31800, Stop: 32147, Start Num: 10
Candidate Starts for Mardi_45:
(Start: 10 @31800 has 10 MA's), (28, 31920), (29, 31926), (37, 32031), (40, 32070),

Gene: Mazun_51 Start: 51540, Stop: 51809, Start Num: 24
Candidate Starts for Mazun_51:
(17, 51510), (Start: 24 @51540 has 17 MA's), (32, 51615), (41, 51750), (44, 51780),

Gene: Moleficent_51 Start: 51144, Stop: 51413, Start Num: 24
Candidate Starts for Moleficent_51:
(17, 51114), (Start: 24 @51144 has 17 MA's), (32, 51219), (41, 51354), (44, 51384),

Gene: Morrill_48 Start: 50575, Stop: 50844, Start Num: 24
Candidate Starts for Morrill_48:
(17, 50545), (Start: 24 @50575 has 17 MA's), (32, 50650), (35, 50677), (41, 50785), (44, 50815),

Gene: Muglass_47 Start: 32771, Stop: 33115, Start Num: 10
Candidate Starts for Muglass_47:
(9, 32756), (Start: 10 @32771 has 10 MA's), (29, 32894), (37, 32999),

Gene: Navi1117_46 Start: 32115, Stop: 32462, Start Num: 10
Candidate Starts for Navi1117_46:
(2, 32004), (3, 32016), (Start: 10 @32115 has 10 MA's), (29, 32241), (30, 32265), (37, 32346),

Gene: Nellie_8 Start: 4006, Stop: 4347, Start Num: 18
Candidate Starts for Nellie_8:
(Start: 18 @4006 has 5 MA's), (29, 4054), (43, 4252),

Gene: Phaby_45 Start: 33194, Stop: 33514, Start Num: 24
Candidate Starts for Phaby_45:
(13, 33128), (Start: 18 @33176 has 5 MA's), (Start: 24 @33194 has 17 MA's), (37, 33335),

Gene: Phaila_47 Start: 31602, Stop: 31949, Start Num: 10
Candidate Starts for Phaila_47:
(8, 31587), (Start: 10 @31602 has 10 MA's), (29, 31728), (30, 31752), (37, 31833),

Gene: Pharky_50 Start: 51140, Stop: 51409, Start Num: 24
Candidate Starts for Pharky_50:
(17, 51110), (Start: 24 @51140 has 17 MA's), (32, 51215), (41, 51350), (44, 51380),

Gene: Phedro_50 Start: 51140, Stop: 51409, Start Num: 24

Candidate Starts for Phedro_50:
(17, 51110), (Start: 24 @51140 has 17 MA's), (32, 51215), (41, 51350), (44, 51380),

Gene: Phractured_50 Start: 51140, Stop: 51409, Start Num: 24
Candidate Starts for Phractured_50:
(17, 51110), (Start: 24 @51140 has 17 MA's), (32, 51215), (41, 51350), (44, 51380),

Gene: PhriedRice_51 Start: 51244, Stop: 51513, Start Num: 24
Candidate Starts for PhriedRice_51:
(17, 51214), (Start: 24 @51244 has 17 MA's), (32, 51319), (41, 51454), (44, 51484),

Gene: Phroglets_6 Start: 3739, Stop: 4023, Start Num: 21
Candidate Starts for Phroglets_6:
(20, 3736), (Start: 21 @3739 has 1 MA's),

Gene: PoeMe_45 Start: 31971, Stop: 32318, Start Num: 10
Candidate Starts for PoeMe_45:
(Start: 10 @31971 has 10 MA's), (Start: 11 @31980 has 1 MA's), (28, 32091), (29, 32097), (37, 32202),

Gene: Raunak_44 Start: 30260, Stop: 30571, Start Num: 16
Candidate Starts for Raunak_44:
(1, 30041), (4, 30104), (5, 30152), (Start: 16 @30260 has 1 MA's), (39, 30452), (45, 30563),

Gene: Renaldo_50 Start: 33310, Stop: 33654, Start Num: 10
Candidate Starts for Renaldo_50:
(9, 33295), (Start: 10 @33310 has 10 MA's), (29, 33433), (37, 33538),

Gene: RicoCaldo_50 Start: 51222, Stop: 51491, Start Num: 24
Candidate Starts for RicoCaldo_50:
(Start: 24 @51222 has 17 MA's), (32, 51297), (41, 51432), (44, 51462),

Gene: Spain_44 Start: 30562, Stop: 30873, Start Num: 16
Candidate Starts for Spain_44:
(1, 30343), (4, 30406), (5, 30454), (Start: 16 @30562 has 1 MA's), (39, 30754), (45, 30865),

Gene: StagePhright_50 Start: 51140, Stop: 51409, Start Num: 24
Candidate Starts for StagePhright_50:
(17, 51110), (Start: 24 @51140 has 17 MA's), (32, 51215), (41, 51350), (44, 51380),

Gene: Stardrop_49 Start: 32164, Stop: 32511, Start Num: 10
Candidate Starts for Stardrop_49:
(Start: 10 @32164 has 10 MA's), (28, 32284), (29, 32290), (37, 32395),

Gene: Sunny4976_47 Start: 33511, Stop: 33849, Start Num: 12
Candidate Starts for Sunny4976_47:
(12, 33511), (31, 33646), (37, 33721),

Gene: Tenney120_46 Start: 32008, Stop: 32355, Start Num: 10
Candidate Starts for Tenney120_46:
(Start: 10 @32008 has 10 MA's), (29, 32134), (37, 32239), (40, 32278),

Gene: ThirteenKH_52 Start: 50584, Stop: 50853, Start Num: 24
Candidate Starts for ThirteenKH_52:

(17, 50554), (Start: 24 @50584 has 17 MA's), (32, 50659), (35, 50686), (41, 50794), (44, 50824),

Gene: TrippleS_50 Start: 50733, Stop: 51002, Start Num: 24
Candidate Starts for TrippleS_50:
(17, 50703), (Start: 24 @50733 has 17 MA's), (35, 50835), (41, 50943), (44, 50973),

Gene: TrixiePhattel_46 Start: 31685, Stop: 32023, Start Num: 11
Candidate Starts for TrixiePhattel_46:
(Start: 11 @31685 has 1 MA's), (19, 31757), (29, 31802), (37, 31907),

Gene: Uzumaki_43 Start: 31702, Stop: 32049, Start Num: 10
Candidate Starts for Uzumaki_43:
(8, 31687), (Start: 10 @31702 has 10 MA's), (29, 31828), (30, 31852), (37, 31933), (40, 31972),

Gene: Yafa_52 Start: 50488, Stop: 50757, Start Num: 24
Candidate Starts for Yafa_52:
(17, 50458), (Start: 24 @50488 has 17 MA's), (35, 50590), (41, 50698), (44, 50728),

Gene: Zeina_46 Start: 32021, Stop: 32368, Start Num: 10
Candidate Starts for Zeina_46:
(Start: 10 @32021 has 10 MA's), (28, 32141), (29, 32147), (37, 32252), (40, 32291),