Pham 290999

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 290999 Report

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

Pham number 290999 has 110 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Angelique_49
• Track 2 : EnalisNailo_45, Bradissa_46, Lilas_48
• Track 3 : Confidence_48
• Track 4 : Pollux_49, Floral_47
• Track 5 : Marteena_46, EMsquaredA_47
• Track 6 : Jablanski_50, Pytheas_50
• Track 7 : Wrigley_54
• Track 8 : Posh_53
• Track 9 : BeeGee_54
• Track 10 : Cashline_47
• Track 11 : LonelyBoi_47
• Track 12 : Lton_42, Lucky10_43
• Track 13 : Pepperoni_39
• Track 14 : Ohgeesy_49
• Track 15 : ThankyouJordi_48, WelcomeAyanna_48
• Track 16 : Madeline_46
• Track 17 : Herod_49, Eviarto_50, Nymphadora_50, BatStarr_49, TimTam_50, Hugley_46
• Track 18 : Madavieve_44
• Track 19 : BoyNamedSue_49, AlumE_49, Agueybana_51
• Track 20 : Hyzer_54
• Track 21 : Maridalia_50, Bunnybear_42
• Track 22 : TuertoX_48, Bosnia_50, Lamberg_44, Sahara_47, Bjanes7_45, GemG_48, Ebert_50, JCole_46, Savage_48, Matteo_41, Jalleen_48, Nettuno_44, Sproutie_48, Whiteclaw_48, Clap_48, Haley23_48, Gizermo_48, Mocha12_48, Cynthia_48
• Track 23 : Pickett_42, Manasvini_50, Polly_46, Yeet412_44, LordFarquaad_46, SoilAssassin_44, Eudoria_49, Trumpet_49, Zirinka_46, EdnaMode_43, Zameen_49, Kita_50, Suscepit_49, Attis_44, Tayonia_49, Antonio_49, Neobush_49, Bialota_47
• Track 24 : FroggyToad_48
• Track 25 : Vasanti_46
• Track 26 : Yeezy_46
• Track 27 : PantheRoc_48, BaxterFox_49
• Track 28 : Oregano_49, Annalisa_46
• Track 29 : WinkNick_50, Dolores_49
• Track 30 : Invectra_50, Beenie_42, Samman98_49, Powerball_46, Dorito_44, Thimann_46, Sekhmet_49, DobbysSock_41, MichaelScott_49, Clark_48

- Track 31 : Shlim410_49, Adora_48, Mcklovin_47, Hortense_51, Twinkle_50, Howe_51
- Track 32 : Tuti_50
- Track 33 : Denise_42
- Track 34 : Faith5x5_38
- Track 35 : Moosehead_45
- Track 36 : Sidious_49
- Track 37 : RavenCo17_47
- Track 38 : Morkie_44, OneDirection_39
- Track 39 : PhorbesPhlower_44
- Track 40 : Phistory_57
- Track 41 : Leroy_55
- Track 42 : Malibo_50

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

The start number called the most often in the published annotations is 29, it was called in 80 of the 102 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Agueybana_51, AlumE_49, Angelique_49, Annalisa_46, Antonio_49, Attis_44, BatStarr_49, BaxterFox_49, BeeGee_54, Bialota_47, Bjanes7_45, Bosnia_50, BoyNamedSue_49, Bradissa_46, Bunnybear_42, Clap_48, Confidence_48, Cynthia_48, Denise_42, Dolores_49, EMsquaredA_47, Ebert_50, EdnaMode_43, EnalisNailo_45, Eudoria_49, Eviarto_50, Faith5x5_38, Floral_47, FroggyToad_48, GemG_48, Gizermo_48, Haley23_48, Herod_49, Hugley_46, Hyzer_54, JCole_46, Jablanski_50, Jalleen_48, Kita_50, Lamberg_44, Lilas_48, LonelyBoi_47, LordFarquaad_46, Lton_42, Lucky10_43, Madavieve_44, Malibo_50, Manasvini_50, Maridalia_50, Marteena_46, Matteo_41, Mocha12_48, Moosehead_45, Morkie_44, Neobush_49, Nettuno_44, Nymphadora_50, OneDirection_39, Oregano_49, PantheRoc_48, Pepperoni_39, PhorbesPhlower_44, Pickett_42, Pollux_49, Polly_46, Posh_53, Pytheas_50, RavenCo17_47, Sahara_47, Savage_48, Sidious_49, SoilAssassin_44, Sproutie_48, Suscepit_49, Tayonia_49, ThankyouJordi_48, TimTam_50, Trumpet_49, TuertoX_48, Vasanti_46, WelcomeAyanna_48, Whiteclaw_48, WinkNick_50, Wrigley_54, Yeet412_44, Zameen_49, Zirinka_46,

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

Genes that do not have the "Most Annotated" start:
- Adora_48, Beenie_42, Cashline_47, Clark_48, DobbysSock_41, Dorito_44, Hortense_51, Howe_51, Invectra_50, Leroy_55, Madeline_46, Mcklovin_47, MichaelScott_49, Ohgeesy_49, Phistory_57, Powerball_46, Samman98_49, Sekhmet_49, Shlim410_49, Thimann_46, Tuti_50, Twinkle_50, Yeezy_46,

Summary by start number:

Start 28:
- Found in 2 of 110 (1.8%) of genes in pham
- Manual Annotations of this start: 2 of 102

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Leroy_55 (DN1), Phistory_57 (DN1),

Start 29:
• Found in 87 of 110 (79.1%) of genes in pham
• Manual Annotations of this start: 80 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Agueybana_51 (CZ1), AlumE_49 (CZ1), Angelique_49 (CY1), Annalisa_46 (CZ4), Antonio_49 (CZ1), Attis_44 (CZ2), BatStarr_49 (CZ1), BaxterFox_49 (CZ3), BeeGee_54 (CY5), Bialota_47 (CZ1), Bjanes7_45 (CZ2), Bosnia_50 (CZ1), BoyNamedSue_49 (CZ1), Bradissa_46 (CY1), Bunnybear_42 (CZ), Clap_48 (CZ2), Confidence_48 (CY1), Cynthia_48 (CZ2), Denise_42 (CZ5), Dolores_49 (CZ4), EMsquaredA_47 (CY1), Ebert_50 (CZ2), EdnaMode_43 (CZ2), EnalisNailo_45 (CY1), Eudoria_49 (CZ1), Eviarto_50 (CZ1), Faith5x5_38 (CZ6), Floral_47 (CY1), FroggyToad_48 (CZ2), GemG_48 (CZ2), Gizermo_48 (CZ2), Haley23_48 (CZ2), Herod_49 (CZ1), Hugley_46 (CZ1), Hyzer_54 (CZ1), JCole_46 (CZ2), Jablanski_50 (CY3), Jalleen_48 (CZ2), Kita_50 (CZ1), Lamberg_44 (CZ2), Lilas_48 (CY1), LonelyBoi_47 (CY7), LordFarquaad_46 (CZ2), Lton_42 (CZ), Lucky10_43 (DH), Madavieve_44 (CZ1), Malibo_50 (DW), Manasvini_50 (CZ1), Maridalia_50 (CZ1), Marteena_46 (CY1), Matteo_41 (CZ2), Mocha12_48 (CZ2), Moosehead_45 (CZ6), Morkie_44 (DH), Neobush_49 (CZ1), Nettuno_44 (CZ2), Nymphadora_50 (CZ1), OneDirection_39 (CZ6), Oregano_49 (CZ4), PantheRoc_48 (CZ3), Pepperoni_39 (CZ), PhorbesPhlower_44 (DH), Pickett_42 (CZ2), Pollux_49 (CY1), Polly_46 (CZ1), Posh_53 (CY4), Pytheas_50 (CY3), RavenCo17_47 (CZ8), Sahara_47 (CZ2), Savage_48 (CZ2), Sidious_49 (CZ7), SoilAssassin_44 (CZ2), Sproutie_48 (CZ2), Suscepit_49 (CZ1), Tayonia_49 (CZ1), ThankyouJordi_48 (CZ1), TimTam_50 (CZ1), Trumpet_49 (CZ1), TuertoX_48 (CZ2), Vasanti_46 (CZ2), WelcomeAyanna_48 (CZ1), Whiteclaw_48 (CZ2), WinkNick_50 (CZ4), Wrigley_54 (CY4), Yeet412_44 (CZ2), Zameen_49 (CZ1), Zirinka_46 (CZ1),

Start 30:
• Found in 21 of 110 (19.1%) of genes in pham
• Manual Annotations of this start: 20 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adora_48 (CZ4), Beenie_42 (CZ4), Cashline_47 (CY6), Clark_48 (CZ4), DobbysSock_41 (CZ4), Dorito_44 (CZ4), Hortense_51 (CZ4), Howe_51 (CZ4), Invectra_50 (CZ4), Madeline_46 (CZ1), Mcklovin_47 (CZ4), MichaelScott_49 (CZ4), Ohgeesy_49 (CZ), Powerball_46 (CZ4), Samman98_49 (CZ4), Sekhmet_49 (CZ4), Shlim410_49 (CZ4), Thimann_46 (CZ4), Tuti_50 (CZ4), Twinkle_50 (CZ4), Yeezy_46 (CZ3),

Summary by clusters:

There are 18 clusters represented in this pham: CY3, CY1, CY7, CY5, DH, CY4, CZ2, CZ3, CZ1, CZ6, CZ7, CZ4, CZ5, CZ, DN1, CZ8, DW, CY6,

Info for manual annotations of cluster CY1:
•Start number 29 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY3:
•Start number 29 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:
•Start number 29 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:
•Start number 29 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:
•Start number 30 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:
•Start number 29 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ:
•Start number 29 was manually annotated 2 times for cluster CZ.
•Start number 30 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 29 was manually annotated 24 times for cluster CZ1.
•Start number 30 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ2:
•Start number 29 was manually annotated 23 times for cluster CZ2.

Info for manual annotations of cluster CZ3:
•Start number 29 was manually annotated 2 times for cluster CZ3.
•Start number 30 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster CZ4:
•Start number 29 was manually annotated 4 times for cluster CZ4.
•Start number 30 was manually annotated 16 times for cluster CZ4.

Info for manual annotations of cluster CZ5:
•Start number 29 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:
•Start number 29 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster CZ7:
•Start number 29 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster CZ8:
•Start number 29 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DH:
•Start number 29 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN1:
•Start number 28 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DW:
•Start number 29 was manually annotated 1 time for cluster DW.

Gene Information:

Gene: Adora_48 Start: 37387, Stop: 37614, Start Num: 30
Candidate Starts for Adora_48:
(Start: 30 @37387 has 20 MA's), (45, 37567),

Gene: Agueybana_51 Start: 38410, Stop: 38637, Start Num: 29
Candidate Starts for Agueybana_51:
(Start: 29 @38410 has 80 MA's), (39, 38542),

Gene: AlumE_49 Start: 36910, Stop: 37137, Start Num: 29
Candidate Starts for AlumE_49:
(Start: 29 @36910 has 80 MA's), (39, 37042),

Gene: Angelique_49 Start: 38125, Stop: 38352, Start Num: 29
Candidate Starts for Angelique_49:
(Start: 29 @38125 has 80 MA's), (32, 38152),

Gene: Annalisa_46 Start: 34052, Stop: 34279, Start Num: 29
Candidate Starts for Annalisa_46:
(21, 33968), (Start: 29 @34052 has 80 MA's), (34, 34088), (41, 34214), (45, 34232),

Gene: Antonio_49 Start: 36183, Stop: 36410, Start Num: 29
Candidate Starts for Antonio_49:
(Start: 29 @36183 has 80 MA's),

Gene: Attis_44 Start: 33316, Stop: 33543, Start Num: 29
Candidate Starts for Attis_44:
(Start: 29 @33316 has 80 MA's),

Gene: BatStarr_49 Start: 38153, Stop: 38380, Start Num: 29
Candidate Starts for BatStarr_49:
(Start: 29 @38153 has 80 MA's),

Gene: BaxterFox_49 Start: 37705, Stop: 37932, Start Num: 29
Candidate Starts for BaxterFox_49:
(13, 37507), (14, 37522), (17, 37573), (26, 37684), (Start: 29 @37705 has 80 MA's),

Gene: BeeGee_54 Start: 37637, Stop: 37867, Start Num: 29
Candidate Starts for BeeGee_54:
(22, 37574), (Start: 29 @37637 has 80 MA's), (45, 37814),

Gene: Beenie_42 Start: 34798, Stop: 35025, Start Num: 30
Candidate Starts for Beenie_42:
(Start: 30 @34798 has 20 MA's), (41, 34960), (45, 34978),

Gene: Bialota_47 Start: 36815, Stop: 37042, Start Num: 29
Candidate Starts for Bialota_47:
(Start: 29 @36815 has 80 MA's),

Gene: Bjanes7_45 Start: 33494, Stop: 33718, Start Num: 29
Candidate Starts for Bjanes7_45:
(Start: 29 @33494 has 80 MA's),

Gene: Bosnia_50 Start: 39858, Stop: 40082, Start Num: 29
Candidate Starts for Bosnia_50:
(Start: 29 @39858 has 80 MA's),

Gene: BoyNamedSue_49 Start: 36910, Stop: 37137, Start Num: 29
Candidate Starts for BoyNamedSue_49:
(Start: 29 @36910 has 80 MA's), (39, 37042),

Gene: Bradissa_46 Start: 37251, Stop: 37478, Start Num: 29
Candidate Starts for Bradissa_46:
(13, 37053), (14, 37068), (17, 37119), (26, 37230), (Start: 29 @37251 has 80 MA's),

Gene: Bunnybear_42 Start: 34583, Stop: 34810, Start Num: 29
Candidate Starts for Bunnybear_42:
(Start: 29 @34583 has 80 MA's), (33, 34613),

Gene: Cashline_47 Start: 37401, Stop: 37628, Start Num: 30
Candidate Starts for Cashline_47:
(Start: 30 @37401 has 20 MA's), (36, 37470), (42, 37566), (43, 37569),

Gene: Clap_48 Start: 33673, Stop: 33897, Start Num: 29
Candidate Starts for Clap_48:
(Start: 29 @33673 has 80 MA's),

Gene: Clark_48 Start: 34615, Stop: 34842, Start Num: 30
Candidate Starts for Clark_48:
(Start: 30 @34615 has 20 MA's), (41, 34777), (45, 34795),

Gene: Confidence_48 Start: 35142, Stop: 35369, Start Num: 29
Candidate Starts for Confidence_48:
(26, 35121), (Start: 29 @35142 has 80 MA's),

Gene: Cynthia_48 Start: 33671, Stop: 33895, Start Num: 29
Candidate Starts for Cynthia_48:
(Start: 29 @33671 has 80 MA's),

Gene: Denise_42 Start: 31822, Stop: 32046, Start Num: 29
Candidate Starts for Denise_42:
(Start: 29 @31822 has 80 MA's), (33, 31852), (37, 31921), (44, 31996),

Gene: DobbysSock_41 Start: 33457, Stop: 33684, Start Num: 30
Candidate Starts for DobbysSock_41:
(Start: 30 @33457 has 20 MA's), (41, 33619), (45, 33637),

Gene: Dolores_49 Start: 35132, Stop: 35359, Start Num: 29
Candidate Starts for Dolores_49:
(21, 35048), (Start: 29 @35132 has 80 MA's), (41, 35294), (45, 35312),

Gene: Dorito_44 Start: 33102, Stop: 33329, Start Num: 30
Candidate Starts for Dorito_44:
(Start: 30 @33102 has 20 MA's), (41, 33264), (45, 33282),

Gene: EMsquaredA_47 Start: 36058, Stop: 36288, Start Num: 29
Candidate Starts for EMsquaredA_47:
(25, 36031), (Start: 29 @36058 has 80 MA's), (32, 36085), (45, 36235),

Gene: Ebert_50 Start: 33597, Stop: 33821, Start Num: 29
Candidate Starts for Ebert_50:
(Start: 29 @33597 has 80 MA's),

Gene: EdnaMode_43 Start: 32004, Stop: 32231, Start Num: 29
Candidate Starts for EdnaMode_43:
(Start: 29 @32004 has 80 MA's),

Gene: EnalisNailo_45 Start: 36785, Stop: 37012, Start Num: 29
Candidate Starts for EnalisNailo_45:
(13, 36587), (14, 36602), (17, 36653), (26, 36764), (Start: 29 @36785 has 80 MA's),

Gene: Eudoria_49 Start: 36183, Stop: 36410, Start Num: 29
Candidate Starts for Eudoria_49:
(Start: 29 @36183 has 80 MA's),

Gene: Eviarto_50 Start: 38128, Stop: 38355, Start Num: 29
Candidate Starts for Eviarto_50:
(Start: 29 @38128 has 80 MA's),

Gene: Faith5x5_38 Start: 29451, Stop: 29675, Start Num: 29
Candidate Starts for Faith5x5_38:
(11, 29223), (12, 29247), (21, 29367), (Start: 29 @29451 has 80 MA's), (42, 29613), (45, 29628),

Gene: Floral_47 Start: 37542, Stop: 37772, Start Num: 29
Candidate Starts for Floral_47:
(25, 37515), (Start: 29 @37542 has 80 MA's), (45, 37719),

Gene: FroggyToad_48 Start: 34354, Stop: 34581, Start Num: 29
Candidate Starts for FroggyToad_48:
(Start: 29 @34354 has 80 MA's),

Gene: GemG_48 Start: 33677, Stop: 33901, Start Num: 29
Candidate Starts for GemG_48:
(Start: 29 @33677 has 80 MA's),

Gene: Gizermo_48 Start: 33673, Stop: 33897, Start Num: 29
Candidate Starts for Gizermo_48:
(Start: 29 @33673 has 80 MA's),

Gene: Haley23_48 Start: 33673, Stop: 33897, Start Num: 29
Candidate Starts for Haley23_48:
(Start: 29 @33673 has 80 MA's),

Gene: Herod_49 Start: 38153, Stop: 38380, Start Num: 29
Candidate Starts for Herod_49:
(Start: 29 @38153 has 80 MA's),

Gene: Hortense_51 Start: 38742, Stop: 38969, Start Num: 30

Candidate Starts for Hortense_51:
(Start: 30 @38742 has 20 MA's), (45, 38922),

Gene: Howe_51 Start: 38742, Stop: 38969, Start Num: 30
Candidate Starts for Howe_51:
(Start: 30 @38742 has 20 MA's), (45, 38922),

Gene: Hugley_46 Start: 38152, Stop: 38379, Start Num: 29
Candidate Starts for Hugley_46:
(Start: 29 @38152 has 80 MA's),

Gene: Hyzer_54 Start: 39099, Stop: 39326, Start Num: 29
Candidate Starts for Hyzer_54:
(4, 38766), (7, 38778), (8, 38781), (14, 38916), (17, 38967), (26, 39078), (Start: 29 @39099 has 80 MA's), (33, 39129),

Gene: Invectra_50 Start: 36189, Stop: 36416, Start Num: 30
Candidate Starts for Invectra_50:
(Start: 30 @36189 has 20 MA's), (41, 36351), (45, 36369),

Gene: JCole_46 Start: 32691, Stop: 32915, Start Num: 29
Candidate Starts for JCole_46:
(Start: 29 @32691 has 80 MA's),

Gene: Jablanski_50 Start: 39144, Stop: 39371, Start Num: 29
Candidate Starts for Jablanski_50:
(4, 38811), (8, 38826), (17, 39012), (26, 39123), (Start: 29 @39144 has 80 MA's), (33, 39174),

Gene: Jalleen_48 Start: 33312, Stop: 33536, Start Num: 29
Candidate Starts for Jalleen_48:
(Start: 29 @33312 has 80 MA's),

Gene: Kita_50 Start: 36192, Stop: 36419, Start Num: 29
Candidate Starts for Kita_50:
(Start: 29 @36192 has 80 MA's),

Gene: Lamberg_44 Start: 32182, Stop: 32406, Start Num: 29
Candidate Starts for Lamberg_44:
(Start: 29 @32182 has 80 MA's),

Gene: Leroy_55 Start: 36252, Stop: 36467, Start Num: 28
Candidate Starts for Leroy_55:
(Start: 28 @36252 has 2 MA's), (34, 36294), (43, 36414),

Gene: Lilas_48 Start: 38496, Stop: 38723, Start Num: 29
Candidate Starts for Lilas_48:
(13, 38298), (14, 38313), (17, 38364), (26, 38475), (Start: 29 @38496 has 80 MA's),

Gene: LonelyBoi_47 Start: 38656, Stop: 38883, Start Num: 29
Candidate Starts for LonelyBoi_47:
(24, 38617), (Start: 29 @38656 has 80 MA's), (33, 38686),

Gene: LordFarquaad_46 Start: 33297, Stop: 33524, Start Num: 29

Candidate Starts for LordFarquaad_46:
(Start: 29 @33297 has 80 MA's),

Gene: Lton_42 Start: 29506, Stop: 29730, Start Num: 29
Candidate Starts for Lton_42:
(27, 29488), (Start: 29 @29506 has 80 MA's), (33, 29536), (37, 29605),

Gene: Lucky10_43 Start: 32224, Stop: 32448, Start Num: 29
Candidate Starts for Lucky10_43:
(27, 32206), (Start: 29 @32224 has 80 MA's), (33, 32254), (37, 32323),

Gene: Madavieve_44 Start: 35500, Stop: 35727, Start Num: 29
Candidate Starts for Madavieve_44:
(Start: 29 @35500 has 80 MA's), (31, 35512),

Gene: Madeline_46 Start: 36834, Stop: 37061, Start Num: 30
Candidate Starts for Madeline_46:
(5, 36504), (18, 36708), (Start: 30 @36834 has 20 MA's), (36, 36903), (42, 36999), (43, 37002),

Gene: Malibo_50 Start: 36835, Stop: 37056, Start Num: 29
Candidate Starts for Malibo_50:
(25, 36808), (Start: 29 @36835 has 80 MA's),

Gene: Manasvini_50 Start: 36207, Stop: 36434, Start Num: 29
Candidate Starts for Manasvini_50:
(Start: 29 @36207 has 80 MA's),

Gene: Maridalia_50 Start: 36329, Stop: 36556, Start Num: 29
Candidate Starts for Maridalia_50:
(Start: 29 @36329 has 80 MA's), (33, 36359),

Gene: Marteena_46 Start: 36058, Stop: 36288, Start Num: 29
Candidate Starts for Marteena_46:
(25, 36031), (Start: 29 @36058 has 80 MA's), (32, 36085), (45, 36235),

Gene: Matteo_41 Start: 31224, Stop: 31448, Start Num: 29
Candidate Starts for Matteo_41:
(Start: 29 @31224 has 80 MA's),

Gene: Mcklovin_47 Start: 40209, Stop: 40436, Start Num: 30
Candidate Starts for Mcklovin_47:
(Start: 30 @40209 has 20 MA's), (45, 40389),

Gene: MichaelScott_49 Start: 36092, Stop: 36319, Start Num: 30
Candidate Starts for MichaelScott_49:
(Start: 30 @36092 has 20 MA's), (41, 36254), (45, 36272),

Gene: Mocha12_48 Start: 33673, Stop: 33897, Start Num: 29
Candidate Starts for Mocha12_48:
(Start: 29 @33673 has 80 MA's),

Gene: Moosehead_45 Start: 30439, Stop: 30663, Start Num: 29
Candidate Starts for Moosehead_45:

(Start: 29 @30439 has 80 MA's), (33, 30469), (35, 30502), (37, 30538), (42, 30601),

Gene: Morkie_44 Start: 31328, Stop: 31552, Start Num: 29
Candidate Starts for Morkie_44:
(Start: 29 @31328 has 80 MA's), (33, 31358), (37, 31427),

Gene: Neobush_49 Start: 36177, Stop: 36404, Start Num: 29
Candidate Starts for Neobush_49:
(Start: 29 @36177 has 80 MA's),

Gene: Nettuno_44 Start: 32182, Stop: 32406, Start Num: 29
Candidate Starts for Nettuno_44:
(Start: 29 @32182 has 80 MA's),

Gene: Nymphadora_50 Start: 38152, Stop: 38379, Start Num: 29
Candidate Starts for Nymphadora_50:
(Start: 29 @38152 has 80 MA's),

Gene: Ohgeesy_49 Start: 37629, Stop: 37856, Start Num: 30
Candidate Starts for Ohgeesy_49:
(1, 36966), (3, 37119), (5, 37299), (18, 37503), (Start: 30 @37629 has 20 MA's), (36, 37698), (42, 37794), (43, 37797),

Gene: OneDirection_39 Start: 28942, Stop: 29166, Start Num: 29
Candidate Starts for OneDirection_39:
(Start: 29 @28942 has 80 MA's), (33, 28972), (37, 29041),

Gene: Oregano_49 Start: 34685, Stop: 34912, Start Num: 29
Candidate Starts for Oregano_49:
(21, 34601), (Start: 29 @34685 has 80 MA's), (34, 34721), (41, 34847), (45, 34865),

Gene: PantheRoc_48 Start: 36680, Stop: 36907, Start Num: 29
Candidate Starts for PantheRoc_48:
(13, 36482), (14, 36497), (17, 36548), (26, 36659), (Start: 29 @36680 has 80 MA's),

Gene: Pepperoni_39 Start: 30505, Stop: 30744, Start Num: 29
Candidate Starts for Pepperoni_39:
(16, 30343), (21, 30421), (Start: 29 @30505 has 80 MA's), (38, 30613), (46, 30718),

Gene: Phistory_57 Start: 36512, Stop: 36727, Start Num: 28
Candidate Starts for Phistory_57:
(23, 36473), (Start: 28 @36512 has 2 MA's), (34, 36554), (40, 36647),

Gene: PhorbesPhlower_44 Start: 30696, Stop: 30935, Start Num: 29
Candidate Starts for PhorbesPhlower_44:
(21, 30612), (Start: 29 @30696 has 80 MA's), (38, 30804), (42, 30861), (46, 30909),

Gene: Pickett_42 Start: 30480, Stop: 30707, Start Num: 29
Candidate Starts for Pickett_42:
(Start: 29 @30480 has 80 MA's),

Gene: Pollux_49 Start: 37542, Stop: 37772, Start Num: 29
Candidate Starts for Pollux_49:

(25, 37515), (Start: 29 @37542 has 80 MA's), (45, 37719),

Gene: Polly_46 Start: 35626, Stop: 35853, Start Num: 29
Candidate Starts for Polly_46:
(Start: 29 @35626 has 80 MA's),

Gene: Posh_53 Start: 38901, Stop: 39128, Start Num: 29
Candidate Starts for Posh_53:
(6, 38577), (13, 38703), (14, 38718), (17, 38769), (26, 38880), (Start: 29 @38901 has 80 MA's),

Gene: Powerball_46 Start: 34959, Stop: 35186, Start Num: 30
Candidate Starts for Powerball_46:
(Start: 30 @34959 has 20 MA's), (41, 35121), (45, 35139),

Gene: Pytheas_50 Start: 39143, Stop: 39370, Start Num: 29
Candidate Starts for Pytheas_50:
(4, 38810), (8, 38825), (17, 39011), (26, 39122), (Start: 29 @39143 has 80 MA's), (33, 39173),

Gene: RavenCo17_47 Start: 36363, Stop: 36593, Start Num: 29
Candidate Starts for RavenCo17_47:
(25, 36336), (Start: 29 @36363 has 80 MA's), (45, 36540),

Gene: Sahara_47 Start: 33420, Stop: 33644, Start Num: 29
Candidate Starts for Sahara_47:
(Start: 29 @33420 has 80 MA's),

Gene: Samman98_49 Start: 34718, Stop: 34945, Start Num: 30
Candidate Starts for Samman98_49:
(Start: 30 @34718 has 20 MA's), (41, 34880), (45, 34898),

Gene: Savage_48 Start: 33673, Stop: 33897, Start Num: 29
Candidate Starts for Savage_48:
(Start: 29 @33673 has 80 MA's),

Gene: Sekhmet_49 Start: 35618, Stop: 35845, Start Num: 30
Candidate Starts for Sekhmet_49:
(Start: 30 @35618 has 20 MA's), (41, 35780), (45, 35798),

Gene: Shlim410_49 Start: 38742, Stop: 38969, Start Num: 30
Candidate Starts for Shlim410_49:
(Start: 30 @38742 has 20 MA's), (45, 38922),

Gene: Sidious_49 Start: 37507, Stop: 37734, Start Num: 29
Candidate Starts for Sidious_49:
(Start: 29 @37507 has 80 MA's),

Gene: SoilAssassin_44 Start: 33315, Stop: 33542, Start Num: 29
Candidate Starts for SoilAssassin_44:
(Start: 29 @33315 has 80 MA's),

Gene: Sproutie_48 Start: 33673, Stop: 33897, Start Num: 29
Candidate Starts for Sproutie_48:
(Start: 29 @33673 has 80 MA's),

Gene: Suscepit_49 Start: 36184, Stop: 36411, Start Num: 29
Candidate Starts for Suscepit_49:
(Start: 29 @36184 has 80 MA's),

Gene: Tayonia_49 Start: 36183, Stop: 36410, Start Num: 29
Candidate Starts for Tayonia_49:
(Start: 29 @36183 has 80 MA's),

Gene: ThankyouJordi_48 Start: 38028, Stop: 38255, Start Num: 29
Candidate Starts for ThankyouJordi_48:
(2, 37374), (Start: 29 @38028 has 80 MA's), (44, 38202),

Gene: Thimann_46 Start: 33983, Stop: 34210, Start Num: 30
Candidate Starts for Thimann_46:
(Start: 30 @33983 has 20 MA's), (41, 34145), (45, 34163),

Gene: TimTam_50 Start: 38152, Stop: 38379, Start Num: 29
Candidate Starts for TimTam_50:
(Start: 29 @38152 has 80 MA's),

Gene: Trumpet_49 Start: 36184, Stop: 36411, Start Num: 29
Candidate Starts for Trumpet_49:
(Start: 29 @36184 has 80 MA's),

Gene: TuertoX_48 Start: 33673, Stop: 33897, Start Num: 29
Candidate Starts for TuertoX_48:
(Start: 29 @33673 has 80 MA's),

Gene: Tuti_50 Start: 35433, Stop: 35660, Start Num: 30
Candidate Starts for Tuti_50:
(Start: 30 @35433 has 20 MA's), (34, 35469), (41, 35595), (45, 35613),

Gene: Twinkle_50 Start: 39801, Stop: 40028, Start Num: 30
Candidate Starts for Twinkle_50:
(Start: 30 @39801 has 20 MA's), (45, 39981),

Gene: Vasanti_46 Start: 32681, Stop: 32905, Start Num: 29
Candidate Starts for Vasanti_46:
(25, 32654), (Start: 29 @32681 has 80 MA's),

Gene: WelcomeAyanna_48 Start: 38175, Stop: 38402, Start Num: 29
Candidate Starts for WelcomeAyanna_48:
(2, 37521), (Start: 29 @38175 has 80 MA's), (44, 38349),

Gene: Whiteclaw_48 Start: 33673, Stop: 33897, Start Num: 29
Candidate Starts for Whiteclaw_48:
(Start: 29 @33673 has 80 MA's),

Gene: WinkNick_50 Start: 35055, Stop: 35282, Start Num: 29
Candidate Starts for WinkNick_50:
(21, 34971), (Start: 29 @35055 has 80 MA's), (41, 35217), (45, 35235),

Gene: Wrigley_54 Start: 38058, Stop: 38288, Start Num: 29
Candidate Starts for Wrigley_54:
(9, 37773), (10, 37794), (15, 37884), (19, 37950), (20, 37956), (Start: 29 @38058 has 80 MA's),

Gene: Yeet412_44 Start: 33316, Stop: 33543, Start Num: 29
Candidate Starts for Yeet412_44:
(Start: 29 @33316 has 80 MA's),

Gene: Yeezy_46 Start: 34678, Stop: 34905, Start Num: 30
Candidate Starts for Yeezy_46:
(5, 34348), (18, 34552), (Start: 30 @34678 has 20 MA's), (36, 34747), (41, 34840), (42, 34843), (43, 34846),

Gene: Zameen_49 Start: 36183, Stop: 36410, Start Num: 29
Candidate Starts for Zameen_49:
(Start: 29 @36183 has 80 MA's),

Gene: Zirinka_46 Start: 36803, Stop: 37030, Start Num: 29
Candidate Starts for Zirinka_46:
(Start: 29 @36803 has 80 MA's),