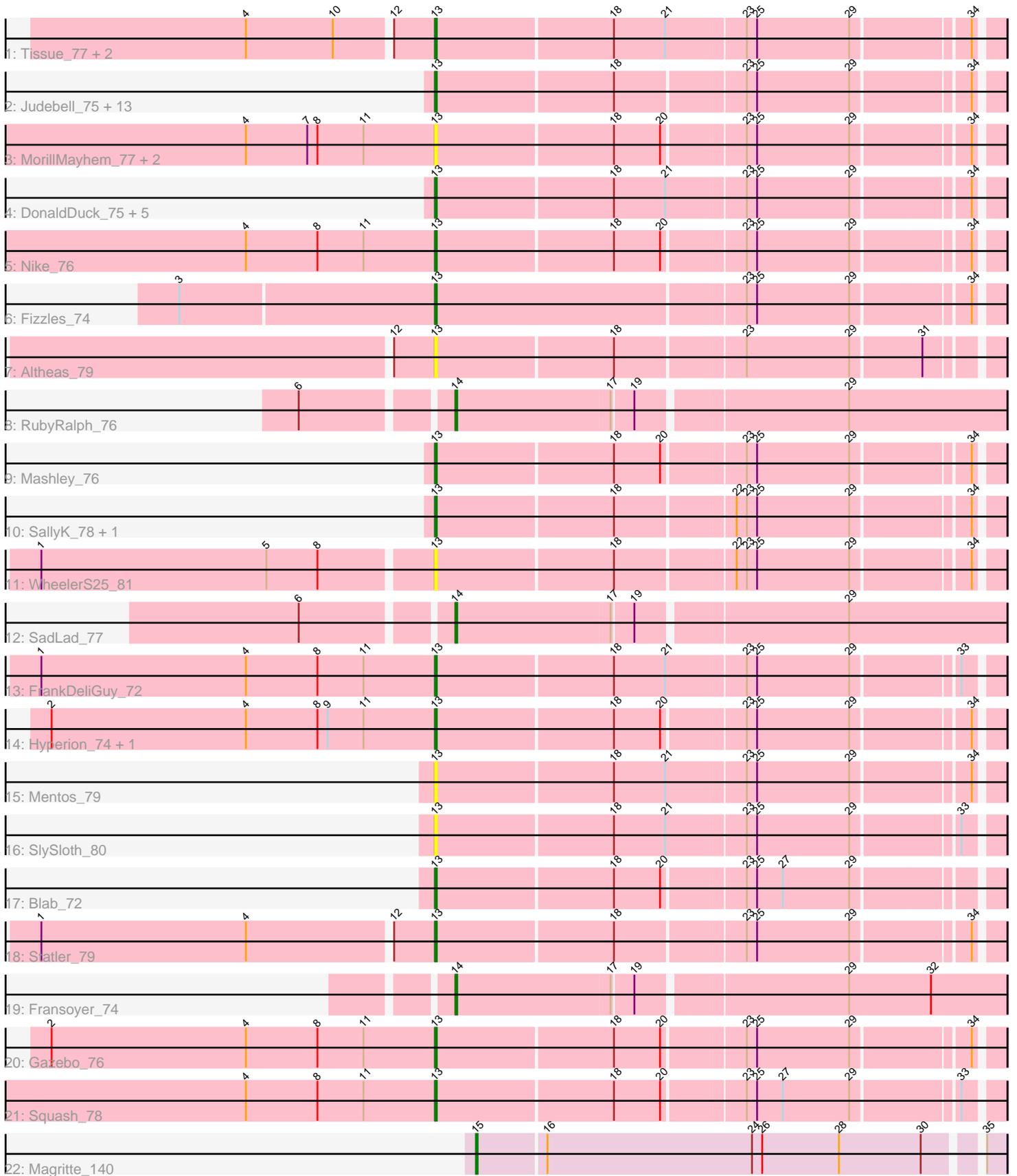# Pham 289520

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 289520 Report

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

Pham number 289520 has 46 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Tissue_77, Grassboy_79, Kyva_79
• Track 2 : Judebell_75, Phabia_75, Quammi_74, Zagie_76, BabyDotz_73, Lonelysoil_73, Casend_76, Wayne3_77, Wheelie_75, Rudy_73, Zhafia_78, Teehee_76, StrawberryJamm_80, Jehoshaphat_77
• Track 3 : MorillMayhem_77, BaconCheese_81, Mila11_79
• Track 4 : DonaldDuck_75, Namago_77, EverythinBagel_75, Viceroy_74, Llemily_75, Sillytadpoles_76
• Track 5 : Nike_76
• Track 6 : Fizzles_74
• Track 7 : Altheas_79
• Track 8 : RubyRalph_76
• Track 9 : Mashley_76
• Track 10 : SallyK_78, Rowlf_73
• Track 11 : WheelerS25_81
• Track 12 : SadLad_77
• Track 13 : FrankDeliGuy_72
• Track 14 : Hyperion_74, AluminumJesus_72
• Track 15 : Mentos_79
• Track 16 : SlySloth_80
• Track 17 : Blab_72
• Track 18 : Statler_79
• Track 19 : Fransoyer_74
• Track 20 : Gazebo_76
• Track 21 : Squash_78
• Track 22 : Magritte_140

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 35 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Altheas_79, AluminumJesus_72, BabyDotz_73, BaconCheese_81, Blab_72, Casend_76, DonaldDuck_75, EverythinBagel_75, Fizzles_74, FrankDeliGuy_72,

Gazebo_76, Grassboy_79, Hyperion_74, Jehoshaphat_77, Judebell_75, Kyva_79, Llemily_75, Lonelysoil_73, Mashley_76, Mentos_79, Mila11_79, MorillMayhem_77, Namago_77, Nike_76, Phabia_75, Quammi_74, Rowlf_73, Rudy_73, SallyK_78, Sillytadpoles_76, SlySloth_80, Squash_78, Statler_79, StrawberryJamm_80, Teehee_76, Tissue_77, Viceroy_74, Wayne3_77, WheelerS25_81, Wheelie_75, Zagie_76, Zhafia_78,

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

Genes that do not have the "Most Annotated" start:
• Fransoyer_74, Magritte_140, RubyRalph_76, SadLad_77,

Summary by start number:

Start 13:
• Found in 42 of 46 (91.3%) of genes in pham
• Manual Annotations of this start: 35 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Altheas_79 (EG), AluminumJesus_72 (EG), BabyDotz_73 (EG), BaconCheese_81 (EG), Blab_72 (EG), Casend_76 (EG), DonaldDuck_75 (EG), EverythinBagel_75 (EG), Fizzles_74 (EG), FrankDeliGuy_72 (EG), Gazebo_76 (EG), Grassboy_79 (EG), Hyperion_74 (EG), Jehoshaphat_77 (EG), Judebell_75 (EG), Kyva_79 (EG), Llemily_75 (EG), Lonelysoil_73 (EG), Mashley_76 (EG), Mentos_79 (EG), Mila11_79 (EG), MorillMayhem_77 (EG), Namago_77 (EG), Nike_76 (EG), Phabia_75 (EG), Quammi_74 (EG), Rowlf_73 (EG), Rudy_73 (EG), SallyK_78 (EG), Sillytadpoles_76 (EG), SlySloth_80 (EG), Squash_78 (EG), Statler_79 (EG), StrawberryJamm_80 (EG), Teehee_76 (EG), Tissue_77 (EG), Viceroy_74 (EG), Wayne3_77 (EG), WheelerS25_81 (EG), Wheelie_75 (EG), Zagie_76 (EG), Zhafia_78 (EG),

Start 14:
• Found in 3 of 46 (6.5%) of genes in pham
• Manual Annotations of this start: 3 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fransoyer_74 (EG), RubyRalph_76 (EG), SadLad_77 (EG),

Start 15:
• Found in 1 of 46 (2.2%) 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: Magritte_140 (singleton),

Summary by clusters:

There are 2 clusters represented in this pham: EG, singleton,

Info for manual annotations of cluster EG:
•Start number 13 was manually annotated 35 times for cluster EG.
•Start number 14 was manually annotated 3 times for cluster EG.

Gene Information:

Gene: Altheas_79 Start: 51911, Stop: 51600, Start Num: 13
Candidate Starts for Altheas_79:
(12, 51935), (Start: 13 @51911 has 35 MA's), (18, 51809), (23, 51737), (29, 51677), (31, 51638),

Gene: AluminumJesus_72 Start: 50517, Stop: 50206, Start Num: 13
Candidate Starts for AluminumJesus_72:
(2, 50742), (4, 50628), (8, 50586), (9, 50580), (11, 50559), (Start: 13 @50517 has 35 MA's), (18, 50415), (20, 50388), (23, 50343), (25, 50337), (29, 50283), (34, 50220),

Gene: BabyDotz_73 Start: 51913, Stop: 51602, Start Num: 13
Candidate Starts for BabyDotz_73:
(Start: 13 @51913 has 35 MA's), (18, 51811), (23, 51739), (25, 51733), (29, 51679), (34, 51616),

Gene: BaconCheese_81 Start: 52843, Stop: 52532, Start Num: 13
Candidate Starts for BaconCheese_81:
(4, 52954), (7, 52918), (8, 52912), (11, 52885), (Start: 13 @52843 has 35 MA's), (18, 52741), (20, 52714), (23, 52669), (25, 52663), (29, 52609), (34, 52546),

Gene: Blab_72 Start: 50808, Stop: 50497, Start Num: 13
Candidate Starts for Blab_72:
(Start: 13 @50808 has 35 MA's), (18, 50706), (20, 50679), (23, 50634), (25, 50628), (27, 50613), (29, 50574),

Gene: Casend_76 Start: 51470, Stop: 51159, Start Num: 13
Candidate Starts for Casend_76:
(Start: 13 @51470 has 35 MA's), (18, 51368), (23, 51296), (25, 51290), (29, 51236), (34, 51173),

Gene: DonaldDuck_75 Start: 50822, Stop: 50508, Start Num: 13
Candidate Starts for DonaldDuck_75:
(Start: 13 @50822 has 35 MA's), (18, 50720), (21, 50690), (23, 50645), (25, 50639), (29, 50585), (34, 50522),

Gene: EverythinBagel_75 Start: 51307, Stop: 50993, Start Num: 13
Candidate Starts for EverythinBagel_75:
(Start: 13 @51307 has 35 MA's), (18, 51205), (21, 51175), (23, 51130), (25, 51124), (29, 51070), (34, 51007),

Gene: Fizzles_74 Start: 50820, Stop: 50506, Start Num: 13
Candidate Starts for Fizzles_74:
(3, 50967), (Start: 13 @50820 has 35 MA's), (23, 50643), (25, 50637), (29, 50583), (34, 50520),

Gene: FrankDeliGuy_72 Start: 50918, Stop: 50604, Start Num: 13
Candidate Starts for FrankDeliGuy_72:
(1, 51149), (4, 51029), (8, 50987), (11, 50960), (Start: 13 @50918 has 35 MA's), (18, 50816), (21, 50786), (23, 50741), (25, 50735), (29, 50681), (33, 50624),

Gene: Fransoyer_74 Start: 51279, Stop: 50968, Start Num: 14
Candidate Starts for Fransoyer_74:
(Start: 14 @51279 has 3 MA's), (17, 51189), (19, 51177), (29, 51060), (32, 51012),

Gene: Gazebo_76 Start: 51735, Stop: 51424, Start Num: 13

Candidate Starts for Gazebo_76:
(2, 51960), (4, 51846), (8, 51804), (11, 51777), (Start: 13 @51735 has 35 MA's), (18, 51633), (20, 51606), (23, 51561), (25, 51555), (29, 51501), (34, 51438),

Gene: Grassboy_79 Start: 51602, Stop: 51288, Start Num: 13
Candidate Starts for Grassboy_79:
(4, 51707), (10, 51656), (12, 51626), (Start: 13 @51602 has 35 MA's), (18, 51500), (21, 51470), (23, 51425), (25, 51419), (29, 51365), (34, 51302),

Gene: Hyperion_74 Start: 50998, Stop: 50687, Start Num: 13
Candidate Starts for Hyperion_74:
(2, 51223), (4, 51109), (8, 51067), (9, 51061), (11, 51040), (Start: 13 @50998 has 35 MA's), (18, 50896), (20, 50869), (23, 50824), (25, 50818), (29, 50764), (34, 50701),

Gene: Jehoshaphat_77 Start: 51738, Stop: 51427, Start Num: 13
Candidate Starts for Jehoshaphat_77:
(Start: 13 @51738 has 35 MA's), (18, 51636), (23, 51564), (25, 51558), (29, 51504), (34, 51441),

Gene: Judebell_75 Start: 50962, Stop: 50651, Start Num: 13
Candidate Starts for Judebell_75:
(Start: 13 @50962 has 35 MA's), (18, 50860), (23, 50788), (25, 50782), (29, 50728), (34, 50665),

Gene: Kyva_79 Start: 51626, Stop: 51312, Start Num: 13
Candidate Starts for Kyva_79:
(4, 51731), (10, 51680), (12, 51650), (Start: 13 @51626 has 35 MA's), (18, 51524), (21, 51494), (23, 51449), (25, 51443), (29, 51389), (34, 51326),

Gene: Llemily_75 Start: 50517, Stop: 50203, Start Num: 13
Candidate Starts for Llemily_75:
(Start: 13 @50517 has 35 MA's), (18, 50415), (21, 50385), (23, 50340), (25, 50334), (29, 50280), (34, 50217),

Gene: Lonelysoil_73 Start: 50274, Stop: 49963, Start Num: 13
Candidate Starts for Lonelysoil_73:
(Start: 13 @50274 has 35 MA's), (18, 50172), (23, 50100), (25, 50094), (29, 50040), (34, 49977),

Gene: Magritte_140 Start: 87455, Stop: 87751, Start Num: 15
Candidate Starts for Magritte_140:
(Start: 15 @87455 has 1 MA's), (16, 87494), (24, 87614), (26, 87620), (28, 87665), (30, 87713), (35, 87740),

Gene: Mashley_76 Start: 51520, Stop: 51209, Start Num: 13
Candidate Starts for Mashley_76:
(Start: 13 @51520 has 35 MA's), (18, 51418), (20, 51391), (23, 51346), (25, 51340), (29, 51286), (34, 51223),

Gene: Mentos_79 Start: 52190, Stop: 51876, Start Num: 13
Candidate Starts for Mentos_79:
(Start: 13 @52190 has 35 MA's), (18, 52088), (21, 52058), (23, 52013), (25, 52007), (29, 51953), (34, 51890),

Gene: Mila11_79 Start: 52894, Stop: 52583, Start Num: 13
Candidate Starts for Mila11_79:

(4, 53005), (7, 52969), (8, 52963), (11, 52936), (Start: 13 @52894 has 35 MA's), (18, 52792), (20, 52765), (23, 52720), (25, 52714), (29, 52660), (34, 52597),

Gene: MorillMayhem_77 Start: 51733, Stop: 51422, Start Num: 13
Candidate Starts for MorillMayhem_77:
(4, 51844), (7, 51808), (8, 51802), (11, 51775), (Start: 13 @51733 has 35 MA's), (18, 51631), (20, 51604), (23, 51559), (25, 51553), (29, 51499), (34, 51436),

Gene: Namago_77 Start: 50967, Stop: 50656, Start Num: 13
Candidate Starts for Namago_77:
(Start: 13 @50967 has 35 MA's), (18, 50865), (21, 50835), (23, 50790), (25, 50784), (29, 50730), (34, 50667),

Gene: Nike_76 Start: 51878, Stop: 51567, Start Num: 13
Candidate Starts for Nike_76:
(4, 51989), (8, 51947), (11, 51920), (Start: 13 @51878 has 35 MA's), (18, 51776), (20, 51749), (23, 51704), (25, 51698), (29, 51644), (34, 51581),

Gene: Phabia_75 Start: 50929, Stop: 50618, Start Num: 13
Candidate Starts for Phabia_75:
(Start: 13 @50929 has 35 MA's), (18, 50827), (23, 50755), (25, 50749), (29, 50695), (34, 50632),

Gene: Quammi_74 Start: 50629, Stop: 50318, Start Num: 13
Candidate Starts for Quammi_74:
(Start: 13 @50629 has 35 MA's), (18, 50527), (23, 50455), (25, 50449), (29, 50395), (34, 50332),

Gene: Rowlf_73 Start: 50836, Stop: 50525, Start Num: 13
Candidate Starts for Rowlf_73:
(Start: 13 @50836 has 35 MA's), (18, 50734), (22, 50668), (23, 50662), (25, 50656), (29, 50602), (34, 50539),

Gene: RubyRalph_76 Start: 51304, Stop: 50993, Start Num: 14
Candidate Starts for RubyRalph_76:
(6, 51385), (Start: 14 @51304 has 3 MA's), (17, 51214), (19, 51202), (29, 51085),

Gene: Rudy_73 Start: 50665, Stop: 50354, Start Num: 13
Candidate Starts for Rudy_73:
(Start: 13 @50665 has 35 MA's), (18, 50563), (23, 50491), (25, 50485), (29, 50431), (34, 50368),

Gene: SadLad_77 Start: 52210, Stop: 51899, Start Num: 14
Candidate Starts for SadLad_77:
(6, 52291), (Start: 14 @52210 has 3 MA's), (17, 52120), (19, 52108), (29, 51991),

Gene: SallyK_78 Start: 52367, Stop: 52056, Start Num: 13
Candidate Starts for SallyK_78:
(Start: 13 @52367 has 35 MA's), (18, 52265), (22, 52199), (23, 52193), (25, 52187), (29, 52133), (34, 52070),

Gene: Sillytadpoles_76 Start: 50505, Stop: 50191, Start Num: 13
Candidate Starts for Sillytadpoles_76:
(Start: 13 @50505 has 35 MA's), (18, 50403), (21, 50373), (23, 50328), (25, 50322), (29, 50268), (34, 50205),

Gene: SlySloth_80 Start: 51475, Stop: 51161, Start Num: 13
Candidate Starts for SlySloth_80:
(Start: 13 @51475 has 35 MA's), (18, 51373), (21, 51343), (23, 51298), (25, 51292), (29, 51238), (33, 51181),

Gene: Squash_78 Start: 51600, Stop: 51289, Start Num: 13
Candidate Starts for Squash_78:
(4, 51711), (8, 51669), (11, 51642), (Start: 13 @51600 has 35 MA's), (18, 51498), (20, 51471), (23, 51426), (25, 51420), (27, 51405), (29, 51366), (33, 51309),

Gene: Statler_79 Start: 51552, Stop: 51241, Start Num: 13
Candidate Starts for Statler_79:
(1, 51777), (4, 51657), (12, 51576), (Start: 13 @51552 has 35 MA's), (18, 51450), (23, 51378), (25, 51372), (29, 51318), (34, 51255),

Gene: StrawberryJamm_80 Start: 50770, Stop: 50459, Start Num: 13
Candidate Starts for StrawberryJamm_80:
(Start: 13 @50770 has 35 MA's), (18, 50668), (23, 50596), (25, 50590), (29, 50536), (34, 50473),

Gene: Teehee_76 Start: 51735, Stop: 51424, Start Num: 13
Candidate Starts for Teehee_76:
(Start: 13 @51735 has 35 MA's), (18, 51633), (23, 51561), (25, 51555), (29, 51501), (34, 51438),

Gene: Tissue_77 Start: 51233, Stop: 50919, Start Num: 13
Candidate Starts for Tissue_77:
(4, 51338), (10, 51287), (12, 51257), (Start: 13 @51233 has 35 MA's), (18, 51131), (21, 51101), (23, 51056), (25, 51050), (29, 50996), (34, 50933),

Gene: Viceroy_74 Start: 50638, Stop: 50324, Start Num: 13
Candidate Starts for Viceroy_74:
(Start: 13 @50638 has 35 MA's), (18, 50536), (21, 50506), (23, 50461), (25, 50455), (29, 50401), (34, 50338),

Gene: Wayne3_77 Start: 51498, Stop: 51187, Start Num: 13
Candidate Starts for Wayne3_77:
(Start: 13 @51498 has 35 MA's), (18, 51396), (23, 51324), (25, 51318), (29, 51264), (34, 51201),

Gene: WheelerS25_81 Start: 52133, Stop: 51822, Start Num: 13
Candidate Starts for WheelerS25_81:
(1, 52358), (5, 52226), (8, 52196), (Start: 13 @52133 has 35 MA's), (18, 52031), (22, 51965), (23, 51959), (25, 51953), (29, 51899), (34, 51836),

Gene: Wheelie_75 Start: 50819, Stop: 50508, Start Num: 13
Candidate Starts for Wheelie_75:
(Start: 13 @50819 has 35 MA's), (18, 50717), (23, 50645), (25, 50639), (29, 50585), (34, 50522),

Gene: Zagie_76 Start: 51047, Stop: 50736, Start Num: 13
Candidate Starts for Zagie_76:
(Start: 13 @51047 has 35 MA's), (18, 50945), (23, 50873), (25, 50867), (29, 50813), (34, 50750),

Gene: Zhafia_78 Start: 51299, Stop: 50988, Start Num: 13
Candidate Starts for Zhafia_78:
(Start: 13 @51299 has 35 MA's), (18, 51197), (23, 51125), (25, 51119), (29, 51065), (34, 51002),