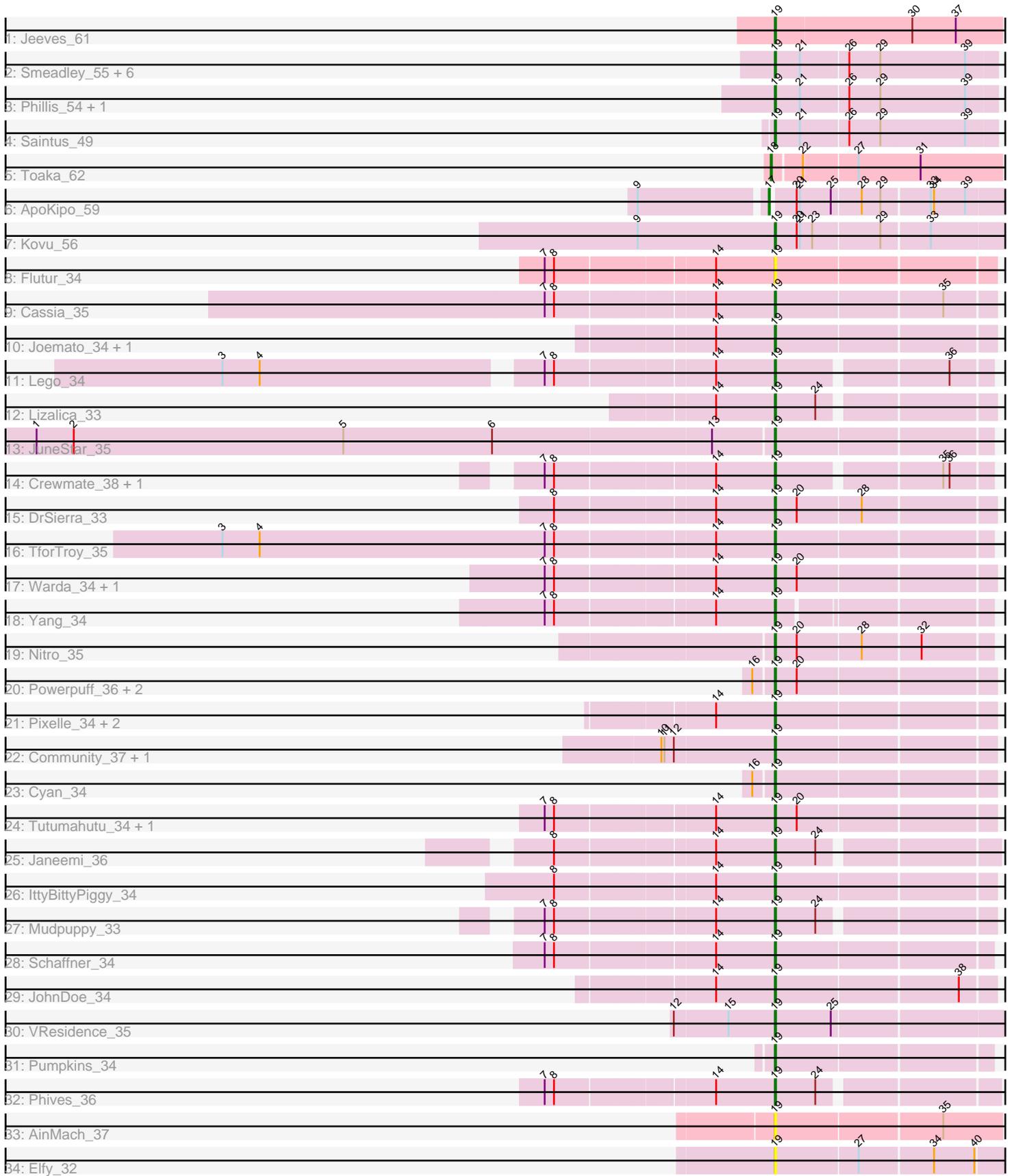# Pham 291250

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 291250 Report

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

Pham number 291250 has 50 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Jeeves_61
• Track 2 : Smeadley_55, Stephig9_55, Groundhog_53, Astro_54, NearlyHeadless_54, Roary_55, Danforth_54
• Track 3 : Phillis_54, Dixon_54
• Track 4 : Saintus_49
• Track 5 : Toaka_62
• Track 6 : ApoKipo_59
• Track 7 : Kovu_56
• Track 8 : Flutur_34
• Track 9 : Cassia_35
• Track 10 : Joemato_34, Simpson_36
• Track 11 : Lego_34
• Track 12 : Lizalica_33
• Track 13 : JuneStar_35
• Track 14 : Crewmate_38, ObiToo_37
• Track 15 : DrSierra_33
• Track 16 : TforTroy_35
• Track 17 : Warda_34, Tbone_33
• Track 18 : Yang_34
• Track 19 : Nitro_35
• Track 20 : Powerpuff_36, Kaylissa_34, YesChef_34
• Track 21 : Pixelle_34, Tian_34, Amyev_34
• Track 22 : Community_37, Tuck_38
• Track 23 : Cyan_34
• Track 24 : Tutumahutu_34, AGrandiflora_35
• Track 25 : Janeemi_36
• Track 26 : IttyBittyPiggy_34
• Track 27 : Mudpuppy_33
• Track 28 : Schaffner_34
• Track 29 : JohnDoe_34
• Track 30 : VResidence_35
• Track 31 : Pumpkins_34
• Track 32 : Phives_36
• Track 33 : AinMach_37
• Track 34 : Elfy_32

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

The start number called the most often in the published annotations is 19, it was called in 41 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AGrandiflora_35, AinMach_37, Amyev_34, Astro_54, Cassia_35, Community_37, Crewmate_38, Cyan_34, Danforth_54, Dixon_54, DrSierra_33, Elfy_32, Flutur_34, Groundhog_53, IttyBittyPiggy_34, Janeemi_36, Jeeves_61, Joemato_34, JohnDoe_34, JuneStar_35, Kaylissa_34, Kovu_56, Lego_34, Lizalica_33, Mudpuppy_33, NearlyHeadless_54, Nitro_35, ObiToo_37, Phillis_54, Phives_36, Pixelle_34, Powerpuff_36, Pumpkins_34, Roary_55, Saintus_49, Schaffner_34, Simpson_36, Smeadley_55, Stephig9_55, Tbone_33, TforTroy_35, Tian_34, Tuck_38, Tutumahutu_34, VResidence_35, Warda_34, Yang_34, YesChef_34,

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

Genes that do not have the "Most Annotated" start:
• ApoKipo_59, Toaka_62,

Summary by start number:

Start 17:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ApoKipo_59 (AL),

Start 18:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Toaka_62 (A9),

Start 19:
• Found in 48 of 50 (96.0%) of genes in pham
• Manual Annotations of this start: 41 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AGrandiflora_35 (AZ1), AinMach_37 (AZ7), Amyev_34 (AZ1), Astro_54 (A8), Cassia_35 (AZ1), Community_37 (AZ1), Crewmate_38 (AZ1), Cyan_34 (AZ1), Danforth_54 (A8), Dixon_54 (A8), DrSierra_33 (AZ1), Elfy_32 (FP), Flutur_34 (AZ), Groundhog_53 (A8), IttyBittyPiggy_34 (AZ1), Janeemi_36 (AZ1), Jeeves_61 (A14), Joemato_34 (AZ1), JohnDoe_34 (AZ1), JuneStar_35 (AZ1), Kaylissa_34 (AZ1), Kovu_56 (AL), Lego_34 (AZ1), Lizalica_33 (AZ1), Mudpuppy_33 (AZ1), NearlyHeadless_54 (A8), Nitro_35 (AZ1), ObiToo_37 (AZ1), Phillis_54 (A8), Phives_36 (AZ1), Pixelle_34 (AZ1), Powerpuff_36 (AZ1), Pumpkins_34 (AZ1), Roary_55 (A8), Saintus_49 (A8), Schaffner_34 (AZ1), Simpson_36 (AZ1), Smeadley_55 (A8), Stephig9_55 (A8), Tbone_33 (AZ1), TforTroy_35 (AZ1), Tian_34 (AZ1), Tuck_38 (AZ1), Tutumahutu_34 (AZ1), VResidence_35 (AZ1), Warda_34 (AZ1), Yang_34 (AZ1), YesChef_34 (AZ1),

Summary by clusters:

There are 8 clusters represented in this pham: FP, A14, AL, AZ1, A9, A8, AZ, AZ7,

Info for manual annotations of cluster A14:
•Start number 19 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A8:
•Start number 19 was manually annotated 10 times for cluster A8.

Info for manual annotations of cluster A9:
•Start number 18 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AL:
•Start number 17 was manually annotated 1 time for cluster AL.
•Start number 19 was manually annotated 1 time for cluster AL.

Info for manual annotations of cluster AZ1:
•Start number 19 was manually annotated 29 times for cluster AZ1.

Gene Information:
Gene: AGrandiflora_35 Start: 24933, Stop: 25136, Start Num: 19
Candidate Starts for AGrandiflora_35:
(7, 24723), (8, 24732), (14, 24876), (Start: 19 @24933 has 41 MA's), (20, 24954),

Gene: AinMach_37 Start: 26036, Stop: 26248, Start Num: 19
Candidate Starts for AinMach_37:
(Start: 19 @26036 has 41 MA's), (35, 26192),

Gene: Amyev_34 Start: 26617, Stop: 26820, Start Num: 19
Candidate Starts for Amyev_34:
(14, 26560), (Start: 19 @26617 has 41 MA's),

Gene: ApoKipo_59 Start: 32711, Stop: 32962, Start Num: 17
Candidate Starts for ApoKipo_59:
(9, 32594), (Start: 17 @32711 has 1 MA's), (20, 32732), (21, 32735), (25, 32765), (28, 32792), (29, 32810), (33, 32855), (34, 32858), (39, 32888),

Gene: Astro_54 Start: 36175, Stop: 35966, Start Num: 19
Candidate Starts for Astro_54:
(Start: 19 @36175 has 41 MA's), (21, 36151), (26, 36106), (29, 36076), (39, 35995),

Gene: Cassia_35 Start: 25537, Stop: 25740, Start Num: 19
Candidate Starts for Cassia_35:
(7, 25327), (8, 25336), (14, 25480), (Start: 19 @25537 has 41 MA's), (35, 25693),

Gene: Community_37 Start: 27274, Stop: 27477, Start Num: 19

Candidate Starts for Community_37:
(10, 27166), (11, 27169), (12, 27178), (Start: 19 @27274 has 41 MA's),

Gene: Crewmate_38 Start: 25775, Stop: 25966, Start Num: 19
Candidate Starts for Crewmate_38:
(7, 25565), (8, 25574), (14, 25718), (Start: 19 @25775 has 41 MA's), (35, 25922), (36, 25928),

Gene: Cyan_34 Start: 24987, Stop: 25190, Start Num: 19
Candidate Starts for Cyan_34:
(16, 24969), (Start: 19 @24987 has 41 MA's),

Gene: Danforth_54 Start: 36204, Stop: 35995, Start Num: 19
Candidate Starts for Danforth_54:
(Start: 19 @36204 has 41 MA's), (21, 36180), (26, 36135), (29, 36105), (39, 36024),

Gene: Dixon_54 Start: 36029, Stop: 35820, Start Num: 19
Candidate Starts for Dixon_54:
(Start: 19 @36029 has 41 MA's), (21, 36005), (26, 35960), (29, 35930), (39, 35849),

Gene: DrSierra_33 Start: 23846, Stop: 24049, Start Num: 19
Candidate Starts for DrSierra_33:
(8, 23645), (14, 23789), (Start: 19 @23846 has 41 MA's), (20, 23867), (28, 23927),

Gene: Elfy_32 Start: 24177, Stop: 24389, Start Num: 19
Candidate Starts for Elfy_32:
(Start: 19 @24177 has 41 MA's), (27, 24255), (34, 24324), (40, 24363),

Gene: Flutur_34 Start: 25245, Stop: 25448, Start Num: 19
Candidate Starts for Flutur_34:
(7, 25035), (8, 25044), (14, 25188), (Start: 19 @25245 has 41 MA's),

Gene: Groundhog_53 Start: 36119, Stop: 35910, Start Num: 19
Candidate Starts for Groundhog_53:
(Start: 19 @36119 has 41 MA's), (21, 36095), (26, 36050), (29, 36020), (39, 35939),

Gene: IttyBittyPiggy_34 Start: 25104, Stop: 25307, Start Num: 19
Candidate Starts for IttyBittyPiggy_34:
(8, 24903), (14, 25047), (Start: 19 @25104 has 41 MA's),

Gene: Janeemi_36 Start: 27086, Stop: 27283, Start Num: 19
Candidate Starts for Janeemi_36:
(8, 26885), (14, 27029), (Start: 19 @27086 has 41 MA's), (24, 27125),

Gene: Jeeves_61 Start: 37860, Stop: 37645, Start Num: 19
Candidate Starts for Jeeves_61:
(Start: 19 @37860 has 41 MA's), (30, 37731), (37, 37689),

Gene: Joemato_34 Start: 25018, Stop: 25221, Start Num: 19
Candidate Starts for Joemato_34:
(14, 24961), (Start: 19 @25018 has 41 MA's),

Gene: JohnDoe_34 Start: 25009, Stop: 25212, Start Num: 19
Candidate Starts for JohnDoe_34:

(14, 24952), (Start: 19 @25009 has 41 MA's), (38, 25180),

Gene: JuneStar_35 Start: 27209, Stop: 27409, Start Num: 19
Candidate Starts for JuneStar_35:
(1, 26504), (2, 26540), (5, 26801), (6, 26945), (13, 27152), (Start: 19 @27209 has 41 MA's),

Gene: Kaylissa_34 Start: 24954, Stop: 25157, Start Num: 19
Candidate Starts for Kaylissa_34:
(16, 24936), (Start: 19 @24954 has 41 MA's), (20, 24975),

Gene: Kovu_56 Start: 33011, Stop: 33289, Start Num: 19
Candidate Starts for Kovu_56:
(9, 32879), (Start: 19 @33011 has 41 MA's), (20, 33032), (21, 33035), (23, 33047), (29, 33110), (33, 33155),

Gene: Lego_34 Start: 24912, Stop: 25103, Start Num: 19
Candidate Starts for Lego_34:
(3, 24414), (4, 24450), (7, 24702), (8, 24711), (14, 24855), (Start: 19 @24912 has 41 MA's), (36, 25065),

Gene: Lizalica_33 Start: 24810, Stop: 25004, Start Num: 19
Candidate Starts for Lizalica_33:
(14, 24753), (Start: 19 @24810 has 41 MA's), (24, 24849),

Gene: Mudpuppy_33 Start: 24774, Stop: 24968, Start Num: 19
Candidate Starts for Mudpuppy_33:
(7, 24564), (8, 24573), (14, 24717), (Start: 19 @24774 has 41 MA's), (24, 24813),

Gene: NearlyHeadless_54 Start: 35970, Stop: 35761, Start Num: 19
Candidate Starts for NearlyHeadless_54:
(Start: 19 @35970 has 41 MA's), (21, 35946), (26, 35901), (29, 35871), (39, 35790),

Gene: Nitro_35 Start: 26385, Stop: 26585, Start Num: 19
Candidate Starts for Nitro_35:
(Start: 19 @26385 has 41 MA's), (20, 26406), (28, 26466), (32, 26520),

Gene: ObiToo_37 Start: 25515, Stop: 25706, Start Num: 19
Candidate Starts for ObiToo_37:
(7, 25305), (8, 25314), (14, 25458), (Start: 19 @25515 has 41 MA's), (35, 25662), (36, 25668),

Gene: Phillis_54 Start: 36172, Stop: 35963, Start Num: 19
Candidate Starts for Phillis_54:
(Start: 19 @36172 has 41 MA's), (21, 36148), (26, 36103), (29, 36073), (39, 35992),

Gene: Phives_36 Start: 26903, Stop: 27100, Start Num: 19
Candidate Starts for Phives_36:
(7, 26693), (8, 26702), (14, 26846), (Start: 19 @26903 has 41 MA's), (24, 26942),

Gene: Pixelle_34 Start: 26637, Stop: 26840, Start Num: 19
Candidate Starts for Pixelle_34:
(14, 26580), (Start: 19 @26637 has 41 MA's),

Gene: Powerpuff_36 Start: 26103, Stop: 26306, Start Num: 19

Candidate Starts for Powerpuff_36:
(16, 26085), (Start: 19 @26103 has 41 MA's), (20, 26124),

Gene: Pumpkins_34 Start: 25759, Stop: 25959, Start Num: 19
Candidate Starts for Pumpkins_34:
(Start: 19 @25759 has 41 MA's),

Gene: Roary_55 Start: 36189, Stop: 35980, Start Num: 19
Candidate Starts for Roary_55:
(Start: 19 @36189 has 41 MA's), (21, 36165), (26, 36120), (29, 36090), (39, 36009),

Gene: Saintus_49 Start: 32896, Stop: 32687, Start Num: 19
Candidate Starts for Saintus_49:
(Start: 19 @32896 has 41 MA's), (21, 32872), (26, 32827), (29, 32797), (39, 32716),

Gene: Schaffner_34 Start: 25986, Stop: 26186, Start Num: 19
Candidate Starts for Schaffner_34:
(7, 25776), (8, 25785), (14, 25929), (Start: 19 @25986 has 41 MA's),

Gene: Simpson_36 Start: 25018, Stop: 25221, Start Num: 19
Candidate Starts for Simpson_36:
(14, 24961), (Start: 19 @25018 has 41 MA's),

Gene: Smeadley_55 Start: 36355, Stop: 36146, Start Num: 19
Candidate Starts for Smeadley_55:
(Start: 19 @36355 has 41 MA's), (21, 36331), (26, 36286), (29, 36256), (39, 36175),

Gene: Stephig9_55 Start: 36421, Stop: 36212, Start Num: 19
Candidate Starts for Stephig9_55:
(Start: 19 @36421 has 41 MA's), (21, 36397), (26, 36352), (29, 36322), (39, 36241),

Gene: Tbone_33 Start: 24813, Stop: 25016, Start Num: 19
Candidate Starts for Tbone_33:
(7, 24603), (8, 24612), (14, 24756), (Start: 19 @24813 has 41 MA's), (20, 24834),

Gene: TforTroy_35 Start: 25631, Stop: 25831, Start Num: 19
Candidate Starts for TforTroy_35:
(3, 25109), (4, 25145), (7, 25421), (8, 25430), (14, 25574), (Start: 19 @25631 has 41 MA's),

Gene: Tian_34 Start: 26617, Stop: 26820, Start Num: 19
Candidate Starts for Tian_34:
(14, 26560), (Start: 19 @26617 has 41 MA's),

Gene: Toaka_62 Start: 39506, Stop: 39294, Start Num: 18
Candidate Starts for Toaka_62:
(Start: 18 @39506 has 1 MA's), (22, 39479), (27, 39431), (31, 39371),

Gene: Tuck_38 Start: 27655, Stop: 27858, Start Num: 19
Candidate Starts for Tuck_38:
(10, 27547), (11, 27550), (12, 27559), (Start: 19 @27655 has 41 MA's),

Gene: Tutumahutu_34 Start: 24985, Stop: 25188, Start Num: 19
Candidate Starts for Tutumahutu_34:

(7, 24775), (8, 24784), (14, 24928), (Start: 19 @24985 has 41 MA's), (20, 25006),

Gene: VResidence_35 Start: 25149, Stop: 25406, Start Num: 19
Candidate Starts for VResidence_35:
(12, 25053), (15, 25104), (Start: 19 @25149 has 41 MA's), (25, 25203),

Gene: Warda_34 Start: 24989, Stop: 25192, Start Num: 19
Candidate Starts for Warda_34:
(7, 24779), (8, 24788), (14, 24932), (Start: 19 @24989 has 41 MA's), (20, 25010),

Gene: Yang_34 Start: 25130, Stop: 25321, Start Num: 19
Candidate Starts for Yang_34:
(7, 24920), (8, 24929), (14, 25073), (Start: 19 @25130 has 41 MA's),

Gene: YesChef_34 Start: 24962, Stop: 25165, Start Num: 19
Candidate Starts for YesChef_34:
(16, 24944), (Start: 19 @24962 has 41 MA's), (20, 24983),