Pham 342086


1: Upyo_35
2: Widow_35 + 1
3: Applejacks_35
4: Gustav_36
5: Trine_33
6: Eliott_34 + 13
7: Balloona_36
8: Agatha_33 + 2
9: McDazzle_39 + 3
10: KayGee_39 + 2
11: Biskit_36 + 2
12: ChocoMunchkin_35 + 4
13: Wallaby_37 + 6
14: BigChungus_37 + 1
15: BillDoor_36
16: SummitAcademy_37 + 2
17: Dre3_33 + 1
18: MScarn_36 + 4
19: ChickenTender_38
20: HippoPololi_35
21: Mayweather_41 + 1
22: AikoCarson_37
23: MunkgeeRoachy_33
24: Typhonomachy_33 + 1
25: Malvina_36
26: Emalyn_36 + 1
27: Vine_40
28: Fribs8_34
29: Bavilard_37 + 1
30: Archimedes_45

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 342086 Report

This analysis was run 11/14/26 on database version 672.

Pham number 342086 has 75 members, 16 are drafts.

Phages represented in each track:
• Track 1 : Upyo_35
• Track 2 : Widow_35, Puppers_34
• Track 3 : Applejacks_35
• Track 4 : Gustav_36
• Track 5 : Trine_33
• Track 6 : Eliott_34, Starburst_35, Quasar_34, Nina_34, Socotra_34, Burnsey_33, SweatNTears_35, PsychoKiller_33, GoldHunter_33, Sopespian_33, Axym_33, RSchmailzl_34, RADical_35, RedBaron_37
• Track 7 : Balloona_36
• Track 8 : Agatha_33, Cozz_33, Bubble_33
• Track 9 : McDazzle_39, SheckWes_40, MAnor_39, ElJefes_38
• Track 10 : KayGee_39, Elinal_41, Yucky_40
• Track 11 : Biskit_36, SketchMex_34, Troje_35
• Track 12 : ChocoMunchkin_35, CanesSauce_35, SteamedHams_37, Tolls_37, CaramelLatte_35
• Track 13 : Wallaby_37, MaVan_35, Nibbles_34, Zareef_35, Survivors_35, Wolfwood_35, Azira_35
• Track 14 : BigChungus_37, Feastonyeet_37
• Track 15 : BillDoor_36
• Track 16 : SummitAcademy_37, PotPie_38, CocoaPuff_38
• Track 17 : Dre3_33, Gibbous_33
• Track 18 : MScarn_36, Horseradish_35, Yummy_35, Buttrmlkdreams_35, Blondies_36
• Track 19 : ChickenTender_38
• Track 20 : HippoPololi_35
• Track 21 : Mayweather_41, Pons_39
• Track 22 : AikoCarson_37
• Track 23 : MunkgeeRoachy_33
• Track 24 : Typhonomachy_33, Carsonalex_33
• Track 25 : Malvina_36
• Track 26 : Emalyn_36, Amok_37
• Track 27 : Vine_40
• Track 28 : Fribs8_34
• Track 29 : Bavilard_37, Tarnish_38
• Track 30 : Archimedes_45

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

The start number called the most often in the published annotations is 9, it was called in 52 of the 59 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Agatha_33, AikoCarson_37, Amok_37, Archimedes_45, Axym_33, Balloona_36, Bavilard_37, BigChungus_37, BillDoor_36, Biskit_36, Blondies_36, Bubble_33, Burnsey_33, Buttrmlkdreams_35, CanesSauce_35, CaramelLatte_35, Carsonalex_33, ChickenTender_38, ChocoMunchkin_35, CocoaPuff_38, Cozz_33, Dre3_33, ElJefes_38, Elinal_41, Eliott_34, Emalyn_36, Feastonyeet_37, Fribs8_34, Gibbous_33, GoldHunter_33, Gustav_36, HippoPololi_35, Horseradish_35, KayGee_39, MAnor_39, MScarn_36, Malvina_36, Mayweather_41, McDazzle_39, MunkgeeRoachy_33, Nina_34, Pons_39, PotPie_38, PsychoKiller_33, Puppers_34, Quasar_34, RADical_35, RSchmailzl_34, RedBaron_37, SheckWes_40, SketchMex_34, Socotra_34, Sopespian_33, Starburst_35, SteamedHams_37, SummitAcademy_37, SweatNTears_35, Tarnish_38, Tolls_37, Troje_35, Typhonomachy_33, Upyo_35, Vine_40, Widow_35, Yucky_40, Yummy_35,

Genes that have the "Most Annotated" start but do not call it:
• Azira_35, MaVan_35, Nibbles_34, Survivors_35, Wallaby_37, Wolfwood_35, Zareef_35,

Genes that do not have the "Most Annotated" start:
• Applejacks_35, Trine_33,

Summary by start number:

Start 7:
• Found in 1 of 75 (1.3%) of genes in pham
• Manual Annotations of this start: 1 of 59
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Trine_33 (CD),

Start 8:
• Found in 1 of 75 (1.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Applejacks_35 (CD),

Start 9:
• Found in 73 of 75 (97.3%) of genes in pham
• Manual Annotations of this start: 52 of 59
• Called 90.4% of time when present
• Phage (with cluster) where this start called: Agatha_33 (CT), AikoCarson_37 (CT), Amok_37 (CT), Archimedes_45 (DA), Axym_33 (CT), Balloona_36 (CT), Bavilard_37 (CT), BigChungus_37 (CT), BillDoor_36 (CT), Biskit_36 (CT), Blondies_36 (CT), Bubble_33 (CT), Burnsey_33 (CT), Buttrmlkdreams_35 (CT), CanesSauce_35 (CT), CaramelLatte_35 (CT), Carsonalex_33 (CT), ChickenTender_38 (CT), ChocoMunchkin_35 (CT), CocoaPuff_38 (CT), Cozz_33 (CT), Dre3_33 (CT), ElJefes_38 (CT), Elinal_41 (CT), Eliott_34 (CT), Emalyn_36 (CT), Feastonyeet_37 (CT), Fribs8_34 (CT), Gibbous_33 (CT), GoldHunter_33 (CT), Gustav_36 (CD),

HippoPololi_35 (CT), Horseradish_35 (CT), KayGee_39 (CT), MAnor_39 (CT), MScarn_36 (CT), Malvina_36 (CT), Mayweather_41 (CT), McDazzle_39 (CT), MunkgeeRoachy_33 (CT), Nina_34 (CT), Pons_39 (CT), PotPie_38 (CT), PsychoKiller_33 (CT), Puppers_34 (CD), Quasar_34 (CT), RADical_35 (CT), RSchmailzl_34 (CT), RedBaron_37 (CT), SheckWes_40 (CT), SketchMex_34 (CT), Socotra_34 (CT), Sopespian_33 (CT), Starburst_35 (CT), SteamedHams_37 (CT), SummitAcademy_37 (CT), SweatNTears_35 (CT), Tarnish_38 (CT), Tolls_37 (CT), Troje_35 (CT), Typhonomachy_33 (CT), Upyo_35 (CD), Vine_40 (CT), Widow_35 (CD), Yucky_40 (CT), Yummy_35 (CT),

Start 10:
• Found in 7 of 75 (9.3%) of genes in pham
• Manual Annotations of this start: 6 of 59
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Azira_35 (CT), MaVan_35 (CT), Nibbles_34 (CT), Survivors_35 (CT), Wallaby_37 (CT), Wolfwood_35 (CT), Zareef_35 (CT),

Summary by clusters:

There are 3 clusters represented in this pham: CD, DA, CT,

Info for manual annotations of cluster CD:
•Start number 7 was manually annotated 1 time for cluster CD.
•Start number 9 was manually annotated 4 times for cluster CD.

Info for manual annotations of cluster CT:
•Start number 9 was manually annotated 47 times for cluster CT.
•Start number 10 was manually annotated 6 times for cluster CT.

Info for manual annotations of cluster DA:
•Start number 9 was manually annotated 1 time for cluster DA.

Gene Information:

Gene: Agatha_33 Start: 25902, Stop: 25997, Start Num: 9
Candidate Starts for Agatha_33:
(Start: 9 @25902 has 52 MA's), (13, 25923),

Gene: AikoCarson_37 Start: 27016, Stop: 27111, Start Num: 9
Candidate Starts for AikoCarson_37:
(Start: 9 @27016 has 52 MA's), (20, 27079), (24, 27100),

Gene: Amok_37 Start: 27040, Stop: 27135, Start Num: 9
Candidate Starts for Amok_37:
(Start: 9 @27040 has 52 MA's), (19, 27097), (20, 27103), (24, 27124),

Gene: Applejacks_35 Start: 27188, Stop: 27078, Start Num: 8
Candidate Starts for Applejacks_35:
(3, 27602), (8, 27188), (14, 27146), (25, 27086),

Gene: Archimedes_45 Start: 38693, Stop: 38800, Start Num: 9
Candidate Starts for Archimedes_45:
(6, 38633), (Start: 9 @38693 has 52 MA's), (16, 38744), (17, 38750), (20, 38768), (24, 38789),

Gene: Axym_33 Start: 25881, Stop: 25976, Start Num: 9
Candidate Starts for Axym_33:
(Start: 9 @25881 has 52 MA's), (13, 25902),

Gene: Azira_35 Start: 26826, Stop: 26930, Start Num: 10
Candidate Starts for Azira_35:
(Start: 9 @26823 has 52 MA's), (Start: 10 @26826 has 6 MA's), (13, 26856), (14, 26862), (18, 26889), (24, 26919),

Gene: Balloona_36 Start: 27738, Stop: 27833, Start Num: 9
Candidate Starts for Balloona_36:
(Start: 9 @27738 has 52 MA's), (12, 27753), (13, 27759), (22, 27813), (26, 27828),

Gene: Bavilard_37 Start: 27949, Stop: 28044, Start Num: 9
Candidate Starts for Bavilard_37:
(Start: 9 @27949 has 52 MA's), (12, 27964), (13, 27970), (20, 28012), (22, 28024), (26, 28039),

Gene: BigChungus_37 Start: 28139, Stop: 28234, Start Num: 9
Candidate Starts for BigChungus_37:
(1, 27701), (2, 27713), (Start: 9 @28139 has 52 MA's), (12, 28154), (13, 28160), (19, 28196), (22, 28214), (26, 28229),

Gene: BillDoor_36 Start: 26120, Stop: 26215, Start Num: 9
Candidate Starts for BillDoor_36:
(Start: 9 @26120 has 52 MA's), (12, 26135), (20, 26183),

Gene: Biskit_36 Start: 26209, Stop: 26304, Start Num: 9
Candidate Starts for Biskit_36:
(Start: 9 @26209 has 52 MA's), (13, 26230), (17, 26254),

Gene: Blondies_36 Start: 26185, Stop: 26280, Start Num: 9
Candidate Starts for Blondies_36:
(Start: 9 @26185 has 52 MA's), (13, 26206), (17, 26230),

Gene: Bubble_33 Start: 25882, Stop: 25977, Start Num: 9
Candidate Starts for Bubble_33:
(Start: 9 @25882 has 52 MA's), (13, 25903),

Gene: Burnsey_33 Start: 25894, Stop: 25989, Start Num: 9
Candidate Starts for Burnsey_33:
(Start: 9 @25894 has 52 MA's), (13, 25915),

Gene: Buttrmlkdreams_35 Start: 26191, Stop: 26286, Start Num: 9
Candidate Starts for Buttrmlkdreams_35:
(Start: 9 @26191 has 52 MA's), (13, 26212), (17, 26236),

Gene: CanesSauce_35 Start: 26616, Stop: 26711, Start Num: 9
Candidate Starts for CanesSauce_35:
(Start: 9 @26616 has 52 MA's), (20, 26679), (23, 26694),

Gene: CaramelLatte_35 Start: 26616, Stop: 26711, Start Num: 9
Candidate Starts for CaramelLatte_35:
(Start: 9 @26616 has 52 MA's), (20, 26679), (23, 26694),

Gene: Carsonalex_33 Start: 23980, Stop: 23885, Start Num: 9
Candidate Starts for Carsonalex_33:
(Start: 9 @23980 has 52 MA's), (13, 23959),

Gene: ChickenTender_38 Start: 26436, Stop: 26531, Start Num: 9
Candidate Starts for ChickenTender_38:
(Start: 9 @26436 has 52 MA's), (13, 26457), (15, 26472), (19, 26493),

Gene: ChocoMunchkin_35 Start: 26616, Stop: 26711, Start Num: 9
Candidate Starts for ChocoMunchkin_35:
(Start: 9 @26616 has 52 MA's), (20, 26679), (23, 26694),

Gene: CocoaPuff_38 Start: 28153, Stop: 28248, Start Num: 9
Candidate Starts for CocoaPuff_38:
(1, 27715), (2, 27727), (Start: 9 @28153 has 52 MA's), (12, 28168), (13, 28174), (22, 28228), (26, 28243),

Gene: Cozz_33 Start: 25883, Stop: 25978, Start Num: 9
Candidate Starts for Cozz_33:
(Start: 9 @25883 has 52 MA's), (13, 25904),

Gene: Dre3_33 Start: 26127, Stop: 26225, Start Num: 9
Candidate Starts for Dre3_33:
(5, 26019), (Start: 9 @26127 has 52 MA's), (19, 26187), (20, 26193), (24, 26214), (25, 26217),

Gene: ElJefes_38 Start: 28475, Stop: 28570, Start Num: 9
Candidate Starts for ElJefes_38:
(4, 28265), (Start: 9 @28475 has 52 MA's), (13, 28496), (20, 28538), (26, 28565),

Gene: Elinal_41 Start: 28517, Stop: 28612, Start Num: 9
Candidate Starts for Elinal_41:
(1, 28079), (2, 28091), (Start: 9 @28517 has 52 MA's), (12, 28532), (13, 28538), (20, 28580), (22, 28592), (26, 28607),

Gene: Eliott_34 Start: 25902, Stop: 25997, Start Num: 9
Candidate Starts for Eliott_34:
(Start: 9 @25902 has 52 MA's), (13, 25923),

Gene: Emalyn_36 Start: 26211, Stop: 26306, Start Num: 9
Candidate Starts for Emalyn_36:
(Start: 9 @26211 has 52 MA's), (19, 26268), (20, 26274), (24, 26295),

Gene: Feastonyeet_37 Start: 28139, Stop: 28234, Start Num: 9
Candidate Starts for Feastonyeet_37:
(1, 27701), (2, 27713), (Start: 9 @28139 has 52 MA's), (12, 28154), (13, 28160), (19, 28196), (22, 28214), (26, 28229),

Gene: Fribs8_34 Start: 26556, Stop: 26654, Start Num: 9

Candidate Starts for Fribs8_34:
(5, 26448), (Start: 9 @26556 has 52 MA's), (15, 26595), (21, 26625), (24, 26643), (25, 26646),

Gene: Gibbous_33 Start: 26127, Stop: 26225, Start Num: 9
Candidate Starts for Gibbous_33:
(5, 26019), (Start: 9 @26127 has 52 MA's), (19, 26187), (20, 26193), (24, 26214), (25, 26217),

Gene: GoldHunter_33 Start: 25903, Stop: 25998, Start Num: 9
Candidate Starts for GoldHunter_33:
(Start: 9 @25903 has 52 MA's), (13, 25924),

Gene: Gustav_36 Start: 28099, Stop: 27998, Start Num: 9
Candidate Starts for Gustav_36:
(Start: 9 @28099 has 52 MA's), (13, 28072), (24, 28009),

Gene: HippoPololi_35 Start: 26580, Stop: 26678, Start Num: 9
Candidate Starts for HippoPololi_35:
(Start: 9 @26580 has 52 MA's), (15, 26619), (24, 26667), (25, 26670),

Gene: Horseradish_35 Start: 25719, Stop: 25814, Start Num: 9
Candidate Starts for Horseradish_35:
(Start: 9 @25719 has 52 MA's), (13, 25740), (17, 25764),

Gene: KayGee_39 Start: 28517, Stop: 28612, Start Num: 9
Candidate Starts for KayGee_39:
(1, 28079), (2, 28091), (Start: 9 @28517 has 52 MA's), (12, 28532), (13, 28538), (20, 28580), (22, 28592), (26, 28607),

Gene: MAnor_39 Start: 28918, Stop: 29013, Start Num: 9
Candidate Starts for MAnor_39:
(4, 28708), (Start: 9 @28918 has 52 MA's), (13, 28939), (20, 28981), (26, 29008),

Gene: MScarn_36 Start: 25859, Stop: 25954, Start Num: 9
Candidate Starts for MScarn_36:
(Start: 9 @25859 has 52 MA's), (13, 25880), (17, 25904),

Gene: MaVan_35 Start: 26859, Stop: 26963, Start Num: 10
Candidate Starts for MaVan_35:
(Start: 9 @26856 has 52 MA's), (Start: 10 @26859 has 6 MA's), (13, 26889), (14, 26895), (18, 26922), (24, 26952),

Gene: Malvina_36 Start: 26578, Stop: 26676, Start Num: 9
Candidate Starts for Malvina_36:
(Start: 9 @26578 has 52 MA's), (15, 26617), (19, 26638), (24, 26665), (25, 26668),

Gene: Mayweather_41 Start: 29142, Stop: 29237, Start Num: 9
Candidate Starts for Mayweather_41:
(4, 28932), (Start: 9 @29142 has 52 MA's), (12, 29157), (13, 29163), (20, 29205), (26, 29232),

Gene: McDazzle_39 Start: 28469, Stop: 28564, Start Num: 9
Candidate Starts for McDazzle_39:
(4, 28259), (Start: 9 @28469 has 52 MA's), (13, 28490), (20, 28532), (26, 28559),

Gene: MunkgeeRoachy_33 Start: 25757, Stop: 25852, Start Num: 9
Candidate Starts for MunkgeeRoachy_33:
(Start: 9 @25757 has 52 MA's), (13, 25778), (15, 25793),

Gene: Nibbles_34 Start: 26543, Stop: 26647, Start Num: 10
Candidate Starts for Nibbles_34:
(Start: 9 @26540 has 52 MA's), (Start: 10 @26543 has 6 MA's), (13, 26573), (14, 26579), (18, 26606), (24, 26636),

Gene: Nina_34 Start: 26419, Stop: 26514, Start Num: 9
Candidate Starts for Nina_34:
(Start: 9 @26419 has 52 MA's), (13, 26440),

Gene: Pons_39 Start: 28493, Stop: 28588, Start Num: 9
Candidate Starts for Pons_39:
(4, 28283), (Start: 9 @28493 has 52 MA's), (12, 28508), (13, 28514), (20, 28556), (26, 28583),

Gene: PotPie_38 Start: 29430, Stop: 29525, Start Num: 9
Candidate Starts for PotPie_38:
(1, 28992), (2, 29004), (Start: 9 @29430 has 52 MA's), (12, 29445), (13, 29451), (22, 29505), (26, 29520),

Gene: PsychoKiller_33 Start: 25903, Stop: 25998, Start Num: 9
Candidate Starts for PsychoKiller_33:
(Start: 9 @25903 has 52 MA's), (13, 25924),

Gene: Puppers_34 Start: 26854, Stop: 26753, Start Num: 9
Candidate Starts for Puppers_34:
(Start: 9 @26854 has 52 MA's), (21, 26782), (25, 26761),

Gene: Quasar_34 Start: 26505, Stop: 26600, Start Num: 9
Candidate Starts for Quasar_34:
(Start: 9 @26505 has 52 MA's), (13, 26526),

Gene: RADical_35 Start: 25897, Stop: 25992, Start Num: 9
Candidate Starts for RADical_35:
(Start: 9 @25897 has 52 MA's), (13, 25918),

Gene: RSchmailzl_34 Start: 25940, Stop: 26035, Start Num: 9
Candidate Starts for RSchmailzl_34:
(Start: 9 @25940 has 52 MA's), (13, 25961),

Gene: RedBaron_37 Start: 26138, Stop: 26233, Start Num: 9
Candidate Starts for RedBaron_37:
(Start: 9 @26138 has 52 MA's), (13, 26159),

Gene: SheckWes_40 Start: 28014, Stop: 28109, Start Num: 9
Candidate Starts for SheckWes_40:
(4, 27804), (Start: 9 @28014 has 52 MA's), (13, 28035), (20, 28077), (26, 28104),

Gene: SketchMex_34 Start: 26209, Stop: 26304, Start Num: 9
Candidate Starts for SketchMex_34:
(Start: 9 @26209 has 52 MA's), (13, 26230), (17, 26254),

Gene: Socotra_34 Start: 25902, Stop: 25997, Start Num: 9
Candidate Starts for Socotra_34:
(Start: 9 @25902 has 52 MA's), (13, 25923),

Gene: Sopespian_33 Start: 25904, Stop: 25999, Start Num: 9
Candidate Starts for Sopespian_33:
(Start: 9 @25904 has 52 MA's), (13, 25925),

Gene: Starburst_35 Start: 25897, Stop: 25992, Start Num: 9
Candidate Starts for Starburst_35:
(Start: 9 @25897 has 52 MA's), (13, 25918),

Gene: SteamedHams_37 Start: 26589, Stop: 26684, Start Num: 9
Candidate Starts for SteamedHams_37:
(Start: 9 @26589 has 52 MA's), (20, 26652), (23, 26667),

Gene: SummitAcademy_37 Start: 28059, Stop: 28154, Start Num: 9
Candidate Starts for SummitAcademy_37:
(1, 27621), (2, 27633), (Start: 9 @28059 has 52 MA's), (12, 28074), (13, 28080), (22, 28134), (26, 28149),

Gene: Survivors_35 Start: 26752, Stop: 26856, Start Num: 10
Candidate Starts for Survivors_35:
(Start: 9 @26749 has 52 MA's), (Start: 10 @26752 has 6 MA's), (13, 26782), (14, 26788), (18, 26815), (24, 26845),

Gene: SweatNTears_35 Start: 25800, Stop: 25895, Start Num: 9
Candidate Starts for SweatNTears_35:
(Start: 9 @25800 has 52 MA's), (13, 25821),

Gene: Tarnish_38 Start: 28559, Stop: 28654, Start Num: 9
Candidate Starts for Tarnish_38:
(Start: 9 @28559 has 52 MA's), (12, 28574), (13, 28580), (20, 28622), (22, 28634), (26, 28649),

Gene: Tolls_37 Start: 26688, Stop: 26783, Start Num: 9
Candidate Starts for Tolls_37:
(Start: 9 @26688 has 52 MA's), (20, 26751), (23, 26766),

Gene: Trine_33 Start: 26841, Stop: 26722, Start Num: 7
Candidate Starts for Trine_33:
(Start: 7 @26841 has 1 MA's), (11, 26805), (13, 26796),

Gene: Troje_35 Start: 26216, Stop: 26311, Start Num: 9
Candidate Starts for Troje_35:
(Start: 9 @26216 has 52 MA's), (13, 26237), (17, 26261),

Gene: Typhonomachy_33 Start: 25914, Stop: 26009, Start Num: 9
Candidate Starts for Typhonomachy_33:
(Start: 9 @25914 has 52 MA's), (13, 25935),

Gene: Upyo_35 Start: 28180, Stop: 28079, Start Num: 9
Candidate Starts for Upyo_35:

(Start: 9 @28180 has 52 MA's), (13, 28153), (14, 28147), (16, 28135), (17, 28129), (25, 28087),

Gene: Vine_40 Start: 28791, Stop: 28886, Start Num: 9
Candidate Starts for Vine_40:
(Start: 9 @28791 has 52 MA's), (12, 28806), (13, 28812), (20, 28854), (22, 28866), (26, 28881),

Gene: Wallaby_37 Start: 26853, Stop: 26957, Start Num: 10
Candidate Starts for Wallaby_37:
(Start: 9 @26850 has 52 MA's), (Start: 10 @26853 has 6 MA's), (13, 26883), (14, 26889), (18, 26916), (24, 26946),

Gene: Widow_35 Start: 27935, Stop: 27834, Start Num: 9
Candidate Starts for Widow_35:
(Start: 9 @27935 has 52 MA's), (21, 27863), (25, 27842),

Gene: Wolfwood_35 Start: 26824, Stop: 26928, Start Num: 10
Candidate Starts for Wolfwood_35:
(Start: 9 @26821 has 52 MA's), (Start: 10 @26824 has 6 MA's), (13, 26854), (14, 26860), (18, 26887), (24, 26917),

Gene: Yucky_40 Start: 28731, Stop: 28826, Start Num: 9
Candidate Starts for Yucky_40:
(1, 28293), (2, 28305), (Start: 9 @28731 has 52 MA's), (12, 28746), (13, 28752), (20, 28794), (22, 28806), (26, 28821),

Gene: Yummy_35 Start: 25833, Stop: 25928, Start Num: 9
Candidate Starts for Yummy_35:
(Start: 9 @25833 has 52 MA's), (13, 25854), (17, 25878),

Gene: Zareef_35 Start: 26846, Stop: 26950, Start Num: 10
Candidate Starts for Zareef_35:
(Start: 9 @26843 has 52 MA's), (Start: 10 @26846 has 6 MA's), (13, 26876), (14, 26882), (18, 26909), (24, 26939),