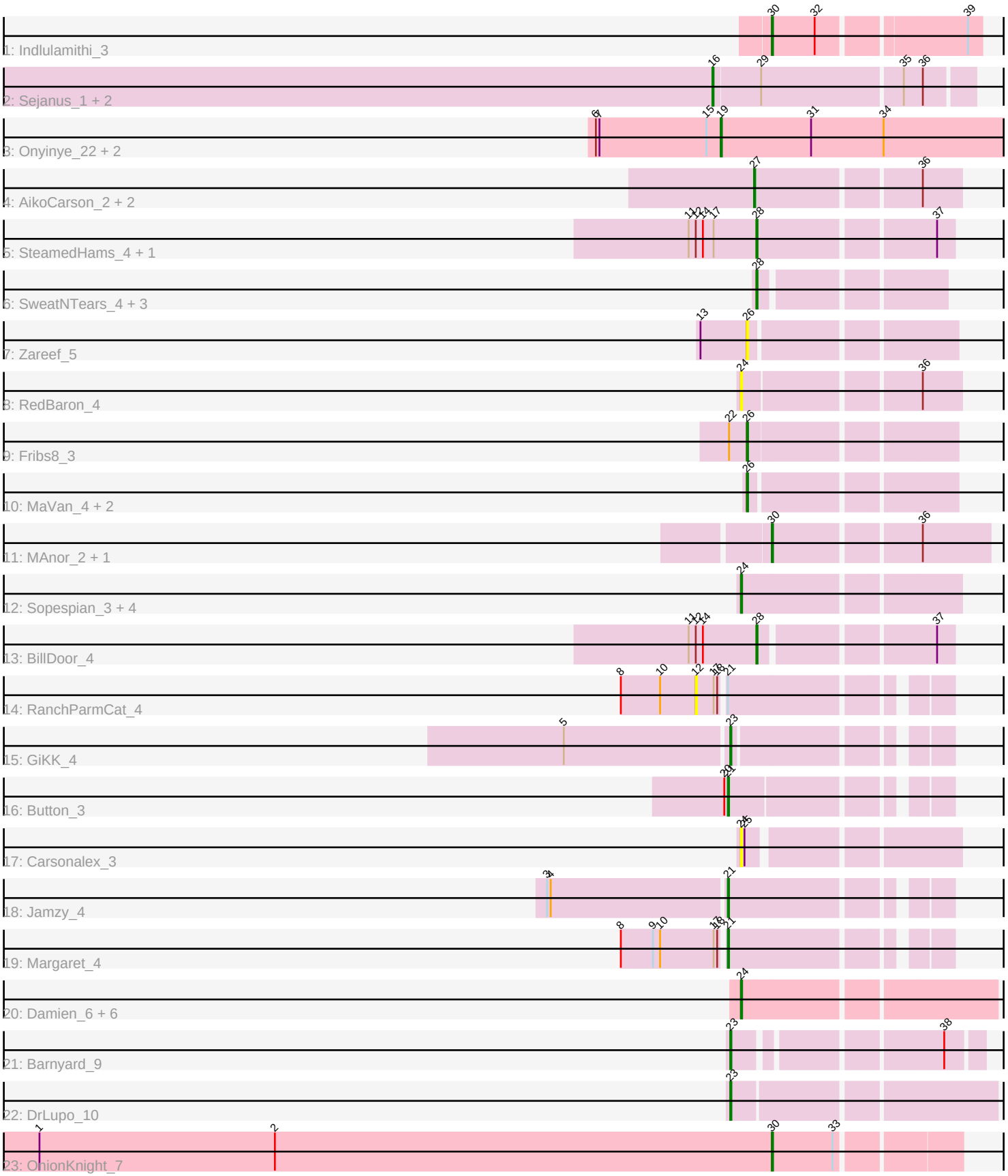
# Pham 196631


1: Indlulamithi_3
2: Sejanus_1 + 2
3: Onyinye_22 + 2
4: AikoCarson_2 + 2
5: SteamedHams_4 + 1
6: SweatNTears_4 + 3
7: Zareef_5
8: RedBaron_4
9: Fribs8_3
10: MaVan_4 + 2
11: MAnor_2 + 1
12: Sopespian_3 + 4
13: BillDoor_4
14: RanchParmCat_4
15: GiKK_4
16: Button_3
17: Carsonalex_3
18: Jamzy_4
19: Margaret_4
20: Damien_6 + 6
21: Barnyard_9
22: DrLupo_10
23: OnionKnight_7

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 196631 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196631 has 46 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Indlulamithi_3
• Track 2 : Sejanus_1, Mask_1, Mao1_1
• Track 3 : Onyinye_22, Leopard_21, Aikoy_21
• Track 4 : AikoCarson_2, Amok_2, Emalyn_2
• Track 5 : SteamedHams_4, Tolls_4
• Track 6 : SweatNTears_4, Horseradish_3, MScarn_4, Yummy_3
• Track 7 : Zareef_5
• Track 8 : RedBaron_4
• Track 9 : Fribs8_3
• Track 10 : MaVan_4, Azira_4, Nibbles_4
• Track 11 : MAnor_2, Pons_2
• Track 12 : Sopespian_3, GoldHunter_3, PsychoKiller_3, Burnsey_3, Eliott_3
• Track 13 : BillDoor_4
• Track 14 : RanchParmCat_4
• Track 15 : GiKK_4
• Track 16 : Button_3
• Track 17 : Carsonalex_3
• Track 18 : Jamzy_4
• Track 19 : Margaret_4
• Track 20 : Damien_6, Thumb_7, Cborch11_7, Phreeze_7, Oaker_7, Beckerton_7, Megatron06_8
• Track 21 : Barnyard_9
• Track 22 : DrLupo_10
• Track 23 : OnionKnight_7

***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 8 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Beckerton_7, Burnsey_3, Carsonalex_3, Cborch11_7, Damien_6, Eliott_3, GoldHunter_3, Megatron06_8, Oaker_7, Phreeze_7, PsychoKiller_3, RedBaron_4, Sopespian_3, Thumb_7,

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

Genes that do not have the "Most Annotated" start:
• AikoCarson_2, Aikoy_21, Amok_2, Azira_4, Barnyard_9, BillDoor_4, Button_3, DrLupo_10, Emalyn_2, Fribs8_3, GiKK_4, Horseradish_3, Indlulamithi_3, Jamzy_4, Leopard_21, MAnor_2, MScarn_4, MaVan_4, Mao1_1, Margaret_4, Mask_1, Nibbles_4, OnionKnight_7, Onyinye_22, Pons_2, RanchParmCat_4, Sejanus_1, SteamedHams_4, SweatNTears_4, Tolls_4, Yummy_3, Zareef_5,

**Summary by start number:**

Start 12:
• Found in 4 of 46 ( 8.7% ) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present
• Phage (with cluster) where this start called: RanchParmCat_4 (CT),

Start 16:
• Found in 3 of 46 ( 6.5% ) of genes in pham
• Manual Annotations of this start: 3 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mao1_1 (AD), Mask_1 (AD), Sejanus_1 (AD),

Start 19:
• Found in 3 of 46 ( 6.5% ) of genes in pham
• Manual Annotations of this start: 3 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aikoy_21 (AE), Leopard_21 (AE), Onyinye_22 (AE),

Start 21:
• Found in 4 of 46 ( 8.7% ) of genes in pham
• Manual Annotations of this start: 3 of 38
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Button_3 (CT), Jamzy_4 (CT), Margaret_4 (CT),

Start 23:
• Found in 3 of 46 ( 6.5% ) of genes in pham
• Manual Annotations of this start: 3 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Barnyard_9 (H2), DrLupo_10 (H2), GiKK_4 (CT),

Start 24:
• Found in 14 of 46 ( 30.4% ) of genes in pham
• Manual Annotations of this start: 8 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beckerton_7 (H1), Burnsey_3 (CT), Carsonalex_3 (CT), Cborch11_7 (H1), Damien_6 (H1), Eliott_3 (CT), GoldHunter_3

(CT), Megatron06_8 (H1), Oaker_7 (H1), Phreeze_7 (H1), PsychoKiller_3 (CT), RedBaron_4 (CT), Sopespian_3 (CT), Thumb_7 (H1),

Start 26:
• Found in 5 of 46 ( 10.9% ) of genes in pham
• Manual Annotations of this start: 4 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Azira_4 (CT), Fribs8_3 (CT), MaVan_4 (CT), Nibbles_4 (CT), Zareef_5 (CT),

Start 27:
• Found in 3 of 46 ( 6.5% ) of genes in pham
• Manual Annotations of this start: 3 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AikoCarson_2 (CT), Amok_2 (CT), Emalyn_2 (CT),

Start 28:
• Found in 7 of 46 ( 15.2% ) of genes in pham
• Manual Annotations of this start: 7 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BillDoor_4 (CT), Horseradish_3 (CT), MScarn_4 (CT), SteamedHams_4 (CT), SweatNTears_4 (CT), Tolls_4 (CT), Yummy_3 (CT),

Start 30:
• Found in 4 of 46 ( 8.7% ) of genes in pham
• Manual Annotations of this start: 4 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Indlulamithi_3 (AC), MAnor_2 (CT), OnionKnight_7 (singleton), Pons_2 (CT),

**Summary by clusters:**

There are 7 clusters represented in this pham: AC, AE, AD, H2, H1, singleton, CT,

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

Info for manual annotations of cluster AD:
•Start number 16 was manually annotated 3 times for cluster AD.

Info for manual annotations of cluster AE:
•Start number 19 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster CT:
•Start number 21 was manually annotated 3 times for cluster CT.
•Start number 23 was manually annotated 1 time for cluster CT.
•Start number 24 was manually annotated 1 time for cluster CT.
•Start number 26 was manually annotated 4 times for cluster CT.
•Start number 27 was manually annotated 3 times for cluster CT.
•Start number 28 was manually annotated 7 times for cluster CT.
•Start number 30 was manually annotated 2 times for cluster CT.

Info for manual annotations of cluster H1:
•Start number 24 was manually annotated 7 times for cluster H1.

Info for manual annotations of cluster H2:
•Start number 23 was manually annotated 2 times for cluster H2.

### *Gene Information:*

Gene: AikoCarson_2 Start: 534, Stop: 692, Start Num: 27
Candidate Starts for AikoCarson_2:
(Start: 27 @534 has 3 MA's), (36, 660),

Gene: Aikoy_21 Start: 13873, Stop: 14109, Start Num: 19
Candidate Starts for Aikoy_21:
(6, 13768), (7, 13771), (15, 13861), (Start: 19 @13873 has 3 MA's), (31, 13948), (34, 14008),

Gene: Amok_2 Start: 535, Stop: 693, Start Num: 27
Candidate Starts for Amok_2:
(Start: 27 @535 has 3 MA's), (36, 661),

Gene: Azira_4 Start: 1179, Stop: 1337, Start Num: 26
Candidate Starts for Azira_4:
(Start: 26 @1179 has 4 MA's),

Gene: Barnyard_9 Start: 6285, Stop: 6467, Start Num: 23
Candidate Starts for Barnyard_9:
(Start: 23 @6285 has 3 MA's), (38, 6438),

Gene: Beckerton_7 Start: 6251, Stop: 6451, Start Num: 24
Candidate Starts for Beckerton_7:
(Start: 24 @6251 has 8 MA's),

Gene: BillDoor_4 Start: 852, Stop: 998, Start Num: 28
Candidate Starts for BillDoor_4:
(11, 795), (12, 801), (14, 807), (Start: 28 @852 has 7 MA's), (37, 984),

Gene: Burnsey_3 Start: 829, Stop: 999, Start Num: 24
Candidate Starts for Burnsey_3:
(Start: 24 @829 has 8 MA's),

Gene: Button_3 Start: 752, Stop: 910, Start Num: 21
Candidate Starts for Button_3:
(20, 749), (Start: 21 @752 has 3 MA's),

Gene: Carsonalex_3 Start: 894, Stop: 1055, Start Num: 24
Candidate Starts for Carsonalex_3:
(Start: 24 @894 has 8 MA's), (25, 897),

Gene: Cborch11_7 Start: 5716, Stop: 5916, Start Num: 24
Candidate Starts for Cborch11_7:

(Start: 24 @5716 has 8 MA's),

Gene: Damien_6 Start: 5716, Stop: 5916, Start Num: 24
Candidate Starts for Damien_6:
(Start: 24 @5716 has 8 MA's),

Gene: DrLupo_10 Start: 6204, Stop: 6410, Start Num: 23
Candidate Starts for DrLupo_10:
(Start: 23 @6204 has 3 MA's),

Gene: Eliott_3 Start: 829, Stop: 999, Start Num: 24
Candidate Starts for Eliott_3:
(Start: 24 @829 has 8 MA's),

Gene: Emalyn_2 Start: 534, Stop: 692, Start Num: 27
Candidate Starts for Emalyn_2:
(Start: 27 @534 has 3 MA's), (36, 660),

Gene: Fribs8_3 Start: 954, Stop: 1115, Start Num: 26
Candidate Starts for Fribs8_3:
(22, 939), (Start: 26 @954 has 4 MA's),

Gene: GiKK_4 Start: 1010, Stop: 1165, Start Num: 23
Candidate Starts for GiKK_4:
(5, 875), (Start: 23 @1010 has 3 MA's),

Gene: GoldHunter_3 Start: 829, Stop: 999, Start Num: 24
Candidate Starts for GoldHunter_3:
(Start: 24 @829 has 8 MA's),

Gene: Horseradish_3 Start: 758, Stop: 898, Start Num: 28
Candidate Starts for Horseradish_3:
(Start: 28 @758 has 7 MA's),

Gene: Indlulamithi_3 Start: 3257, Stop: 3418, Start Num: 30
Candidate Starts for Indlulamithi_3:
(Start: 30 @3257 has 4 MA's), (32, 3293), (39, 3407),

Gene: Jamzy_4 Start: 1014, Stop: 1175, Start Num: 21
Candidate Starts for Jamzy_4:
(3, 867), (4, 870), (Start: 21 @1014 has 3 MA's),

Gene: Leopard_21 Start: 14158, Stop: 14394, Start Num: 19
Candidate Starts for Leopard_21:
(6, 14053), (7, 14056), (15, 14146), (Start: 19 @14158 has 3 MA's), (31, 14233), (34, 14293),

Gene: MAnor_2 Start: 640, Stop: 810, Start Num: 30
Candidate Starts for MAnor_2:
(Start: 30 @640 has 4 MA's), (36, 754),

Gene: MScarn_4 Start: 852, Stop: 992, Start Num: 28
Candidate Starts for MScarn_4:
(Start: 28 @852 has 7 MA's),

Gene: MaVan_4 Start: 1180, Stop: 1338, Start Num: 26
Candidate Starts for MaVan_4:
(Start: 26 @1180 has 4 MA's),

Gene: Mao1_1 Start: 1, Stop: 207, Start Num: 16
Candidate Starts for Mao1_1:
(Start: 16 @1 has 3 MA's), (29, 40), (35, 154), (36, 169),

Gene: Margaret_4 Start: 1387, Stop: 1548, Start Num: 21
Candidate Starts for Margaret_4:
(8, 1303), (9, 1330), (10, 1336), (17, 1381), (18, 1384), (Start: 21 @1387 has 3 MA's),

Gene: Mask_1 Start: 1, Stop: 207, Start Num: 16
Candidate Starts for Mask_1:
(Start: 16 @1 has 3 MA's), (29, 40), (35, 154), (36, 169),

Gene: Megatron06_8 Start: 6251, Stop: 6451, Start Num: 24
Candidate Starts for Megatron06_8:
(Start: 24 @6251 has 8 MA's),

Gene: Nibbles_4 Start: 1180, Stop: 1338, Start Num: 26
Candidate Starts for Nibbles_4:
(Start: 26 @1180 has 4 MA's),

Gene: Oaker_7 Start: 5972, Stop: 6172, Start Num: 24
Candidate Starts for Oaker_7:
(Start: 24 @5972 has 8 MA's),

Gene: OnionKnight_7 Start: 5413, Stop: 5559, Start Num: 30
Candidate Starts for OnionKnight_7:
(1, 4798), (2, 4996), (Start: 30 @5413 has 4 MA's), (33, 5464),

Gene: Onyinye_22 Start: 14039, Stop: 14275, Start Num: 19
Candidate Starts for Onyinye_22:
(6, 13934), (7, 13937), (15, 14027), (Start: 19 @14039 has 3 MA's), (31, 14114), (34, 14174),

Gene: Phreeze_7 Start: 5716, Stop: 5916, Start Num: 24
Candidate Starts for Phreeze_7:
(Start: 24 @5716 has 8 MA's),

Gene: Pons_2 Start: 640, Stop: 810, Start Num: 30
Candidate Starts for Pons_2:
(Start: 30 @640 has 4 MA's), (36, 754),

Gene: PsychoKiller_3 Start: 829, Stop: 999, Start Num: 24
Candidate Starts for PsychoKiller_3:
(Start: 24 @829 has 8 MA's),

Gene: RanchParmCat_4 Start: 1366, Stop: 1548, Start Num: 12
Candidate Starts for RanchParmCat_4:
(8, 1303), (10, 1336), (12, 1366), (17, 1381), (18, 1384), (Start: 21 @1387 has 3 MA's),

Gene: RedBaron_4 Start: 877, Stop: 1044, Start Num: 24
Candidate Starts for RedBaron_4:
(Start: 24 @877 has 8 MA's), (36, 1012),

Gene: Sejanus_1 Start: 1, Stop: 207, Start Num: 16
Candidate Starts for Sejanus_1:
(Start: 16 @1 has 3 MA's), (29, 40), (35, 154), (36, 169),

Gene: Sopespian_3 Start: 829, Stop: 999, Start Num: 24
Candidate Starts for Sopespian_3:
(Start: 24 @829 has 8 MA's),

Gene: SteamedHams_4 Start: 852, Stop: 1004, Start Num: 28
Candidate Starts for SteamedHams_4:
(11, 795), (12, 801), (14, 807), (17, 816), (Start: 28 @852 has 7 MA's), (37, 990),

Gene: SweatNTears_4 Start: 1378, Stop: 1518, Start Num: 28
Candidate Starts for SweatNTears_4:
(Start: 28 @1378 has 7 MA's),

Gene: Thumb_7 Start: 5717, Stop: 5917, Start Num: 24
Candidate Starts for Thumb_7:
(Start: 24 @5717 has 8 MA's),

Gene: Tolls_4 Start: 852, Stop: 1004, Start Num: 28
Candidate Starts for Tolls_4:
(11, 795), (12, 801), (14, 807), (17, 816), (Start: 28 @852 has 7 MA's), (37, 990),

Gene: Yummy_3 Start: 758, Stop: 898, Start Num: 28
Candidate Starts for Yummy_3:
(Start: 28 @758 has 7 MA's),

Gene: Zareef_5 Start: 1180, Stop: 1338, Start Num: 26
Candidate Starts for Zareef_5:
(13, 1141), (Start: 26 @1180 has 4 MA's),