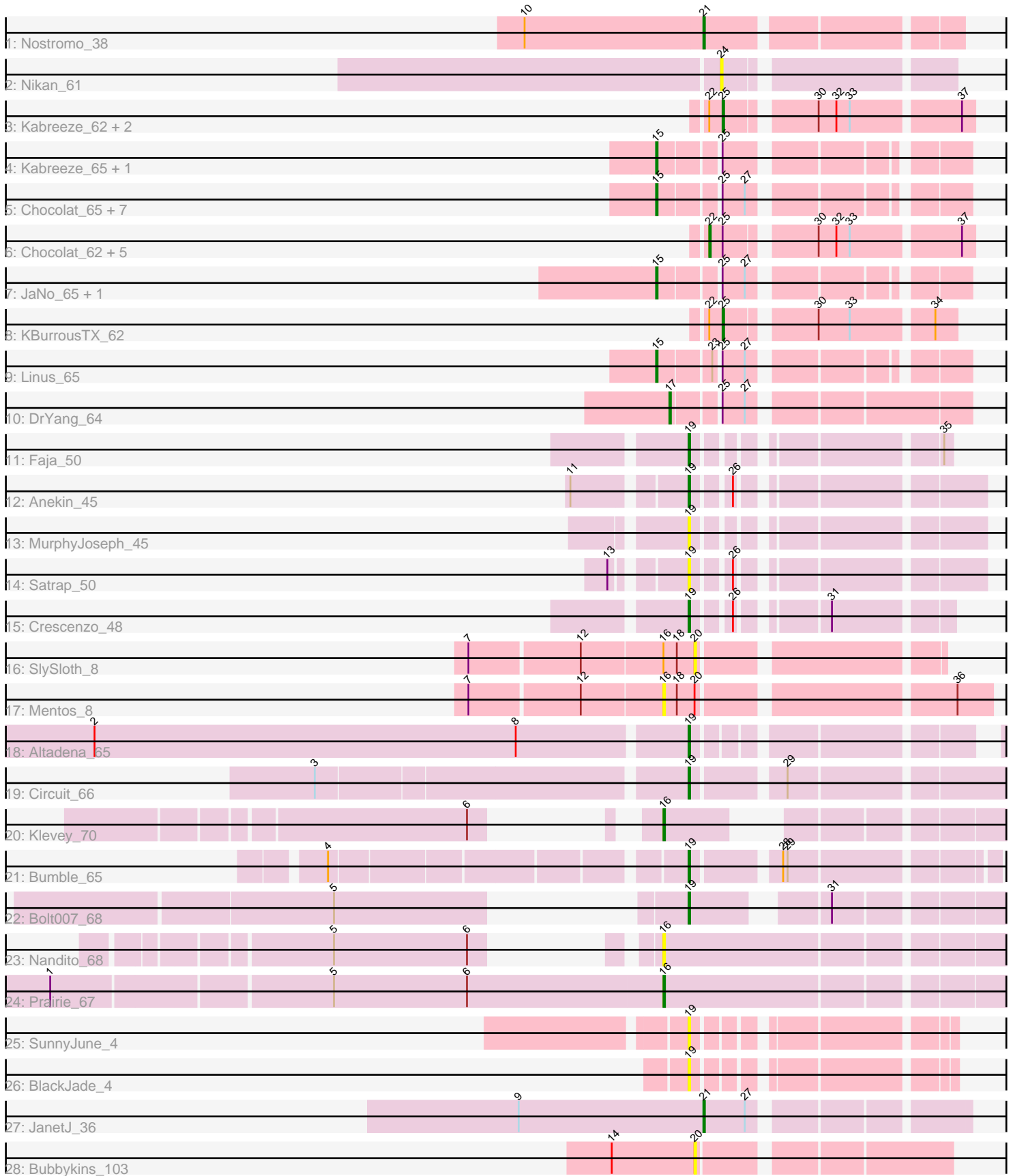


Pham 308823



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 308823 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308823 has 44 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Nostromo_38
- Track 2 : Nikan_61
- Track 3 : Kabreeze_62, HumptyDumpty_62, Linus_62
- Track 4 : Kabreeze_65, HumptyDumpty_65
- Track 5 : Chocolat_65, Conboy_64, EdgarPoe_64, Chubster_66, Chipper1996_650, MoyaNatalis_65, Tophat_65, PrincessTrina_65
- Track 6 : Chocolat_62, Chubster_63, Colucci_64, RosiePosie_61, MoyaNatalis_62, JayCookie_63
- Track 7 : JaNo_65, Mordred_65
- Track 8 : KBurrousTX_62
- Track 9 : Linus_65
- Track 10 : DrYang_64
- Track 11 : Faja_50
- Track 12 : Anekin_45
- Track 13 : MurphyJoseph_45
- Track 14 : Satrap_50
- Track 15 : Crescenzo_48
- Track 16 : SlySloth_8
- Track 17 : Mentos_8
- Track 18 : Altadena_65
- Track 19 : Circuit_66
- Track 20 : Klevey_70
- Track 21 : Bumble_65
- Track 22 : Bolt007_68
- Track 23 : Nandito_68
- Track 24 : Prairie_67
- Track 25 : SunnyJune_4
- Track 26 : BlackJade_4
- Track 27 : JanetJ_36
- Track 28 : Bubbykins_103

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

The start number called the most often in the published annotations is 15, it was called in 12 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Chipper1996_650, Chocolat_65, Chubster_66, Conboy_64, EdgarPoe_64, HumptyDumpty_65, JaNo_65, Kabreeze_65, Linus_65, Mordred_65, MoyaNatalis_65, PrincessTrina_65, Tophat_65,

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

-

Genes that do not have the "Most Annotated" start:

- Altadena_65, Anekin_45, BlackJade_4, Bolt007_68, Bubbykins_103, Bumble_65, Chocolat_62, Chubster_63, Circuit_66, Colucci_64, Crescenzo_48, DrYang_64, Faja_50, HumptyDumpty_62, JanetJ_36, JayCookie_63, KBurrousTX_62, Kabreeze_62, Klevey_70, Linus_62, Mentos_8, MoyaNatalis_62, MurphyJoseph_45, Nandito_68, Nikan_61, Nostromo_38, Prairie_67, RosiePosie_61, Satrap_50, SlySloth_8, SunnyJune_4,

Summary by start number:

Start 15:

- Found in 13 of 44 (29.5%) of genes in pham
- Manual Annotations of this start: 12 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chipper1996_650 (AR), Chocolat_65 (AR), Chubster_66 (AR), Conboy_64 (AR), EdgarPoe_64 (AR), HumptyDumpty_65 (AR), JaNo_65 (AR), Kabreeze_65 (AR), Linus_65 (AR), Mordred_65 (AR), MoyaNatalis_65 (AR), PrincessTrina_65 (AR), Tophat_65 (AR),

Start 16:

- Found in 5 of 44 (11.4%) of genes in pham
- Manual Annotations of this start: 2 of 33
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Klevey_70 (FH), Mentos_8 (EG), Nandito_68 (FH), Prairie_67 (FH),

Start 17:

- Found in 1 of 44 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DrYang_64 (AR),

Start 19:

- Found in 11 of 44 (25.0%) of genes in pham
- Manual Annotations of this start: 7 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altadena_65 (FH), Anekin_45 (AY), BlackJade_4 (FL), Bolt007_68 (FH), Bumble_65 (FH), Circuit_66 (FH), Crescenzo_48 (AY), Faja_50 (AY), MurphyJoseph_45 (AY), Satrap_50 (AY), SunnyJune_4 (FL),

Start 20:

- Found in 3 of 44 (6.8%) of genes in pham

- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bubbykins_103 (UNK), SlySloth_8 (EG),

Start 21:

- Found in 2 of 44 (4.5%) of genes in pham
- Manual Annotations of this start: 2 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JanetJ_36 (FO), Nostromo_38 (AO3),

Start 22:

- Found in 10 of 44 (22.7%) of genes in pham
- Manual Annotations of this start: 5 of 33
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Chocolat_62 (AR), Chubster_63 (AR), Colucci_64 (AR), JayCookie_63 (AR), MoyaNatalis_62 (AR), RosiePosie_61 (AR),

Start 24:

- Found in 1 of 44 (2.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nikan_61 (AP2),

Start 25:

- Found in 24 of 44 (54.5%) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 16.7% of time when present
- Phage (with cluster) where this start called: HumptyDumpty_62 (AR), KBurrousTX_62 (AR), Kabreeze_62 (AR), Linus_62 (AR),

Summary by clusters:

There are 9 clusters represented in this pham: AP2, EG, AY, AR, AO3, FH, UNK, FL, FO,

Info for manual annotations of cluster AO3:

- Start number 21 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster AR:

- Start number 15 was manually annotated 12 times for cluster AR.
- Start number 17 was manually annotated 1 time for cluster AR.
- Start number 22 was manually annotated 5 times for cluster AR.
- Start number 25 was manually annotated 4 times for cluster AR.

Info for manual annotations of cluster AY:

- Start number 19 was manually annotated 3 times for cluster AY.

Info for manual annotations of cluster FH:

- Start number 16 was manually annotated 2 times for cluster FH.
- Start number 19 was manually annotated 4 times for cluster FH.

Info for manual annotations of cluster FO:

•Start number 21 was manually annotated 1 time for cluster FO.

Gene Information:

Gene: Altadena_65 Start: 42328, Stop: 42143, Start Num: 19

Candidate Starts for Altadena_65:

(2, 42721), (8, 42436), (Start: 19 @42328 has 7 MA's),

Gene: Anekin_45 Start: 30188, Stop: 30352, Start Num: 19

Candidate Starts for Anekin_45:

(11, 30122), (Start: 19 @30188 has 7 MA's), (26, 30209),

Gene: BlackJade_4 Start: 3263, Stop: 3409, Start Num: 19

Candidate Starts for BlackJade_4:

(Start: 19 @3263 has 7 MA's),

Gene: Bolt007_68 Start: 44487, Stop: 44305, Start Num: 19

Candidate Starts for Bolt007_68:

(5, 44622), (Start: 19 @44487 has 7 MA's), (31, 44415),

Gene: Bubbykins_103 Start: 61713, Stop: 61865, Start Num: 20

Candidate Starts for Bubbykins_103:

(14, 61659), (20, 61713),

Gene: Bumble_65 Start: 43235, Stop: 43035, Start Num: 19

Candidate Starts for Bumble_65:

(4, 43451), (Start: 19 @43235 has 7 MA's), (28, 43184), (29, 43181),

Gene: Chipper1996_650 Start: 45331, Stop: 45504, Start Num: 15

Candidate Starts for Chipper1996_650:

(Start: 15 @45331 has 12 MA's), (Start: 25 @45367 has 4 MA's), (27, 45382),

Gene: Chocolat_65 Start: 45356, Stop: 45529, Start Num: 15

Candidate Starts for Chocolat_65:

(Start: 15 @45356 has 12 MA's), (Start: 25 @45392 has 4 MA's), (27, 45407),

Gene: Chocolat_62 Start: 44717, Stop: 44875, Start Num: 22

Candidate Starts for Chocolat_62:

(Start: 22 @44717 has 5 MA's), (Start: 25 @44726 has 4 MA's), (30, 44777), (32, 44789), (33, 44798), (37, 44867),

Gene: Chubster_66 Start: 45508, Stop: 45681, Start Num: 15

Candidate Starts for Chubster_66:

(Start: 15 @45508 has 12 MA's), (Start: 25 @45544 has 4 MA's), (27, 45559),

Gene: Chubster_63 Start: 44869, Stop: 45027, Start Num: 22

Candidate Starts for Chubster_63:

(Start: 22 @44869 has 5 MA's), (Start: 25 @44878 has 4 MA's), (30, 44929), (32, 44941), (33, 44950), (37, 45019),

Gene: Circuit_66 Start: 43968, Stop: 43759, Start Num: 19

Candidate Starts for Circuit_66:

(3, 44205), (Start: 19 @43968 has 7 MA's), (29, 43914),

Gene: Colucci_64 Start: 44773, Stop: 44931, Start Num: 22

Candidate Starts for Colucci_64:

(Start: 22 @44773 has 5 MA's), (Start: 25 @44782 has 4 MA's), (30, 44833), (32, 44845), (33, 44854), (37, 44923),

Gene: Conboy_64 Start: 45195, Stop: 45368, Start Num: 15

Candidate Starts for Conboy_64:

(Start: 15 @45195 has 12 MA's), (Start: 25 @45231 has 4 MA's), (27, 45246),

Gene: Crescenzo_48 Start: 31111, Stop: 31254, Start Num: 19

Candidate Starts for Crescenzo_48:

(Start: 19 @31111 has 7 MA's), (26, 31132), (31, 31180),

Gene: DrYang_64 Start: 46974, Stop: 47150, Start Num: 17

Candidate Starts for DrYang_64:

(Start: 17 @46974 has 1 MA's), (Start: 25 @47001 has 4 MA's), (27, 47016),

Gene: EdgarPoe_64 Start: 45195, Stop: 45368, Start Num: 15

Candidate Starts for EdgarPoe_64:

(Start: 15 @45195 has 12 MA's), (Start: 25 @45231 has 4 MA's), (27, 45246),

Gene: Faja_50 Start: 32068, Stop: 32208, Start Num: 19

Candidate Starts for Faja_50:

(Start: 19 @32068 has 7 MA's), (35, 32203),

Gene: HumptyDumpty_62 Start: 44665, Stop: 44814, Start Num: 25

Candidate Starts for HumptyDumpty_62:

(Start: 22 @44656 has 5 MA's), (Start: 25 @44665 has 4 MA's), (30, 44716), (32, 44728), (33, 44737), (37, 44806),

Gene: HumptyDumpty_65 Start: 45295, Stop: 45468, Start Num: 15

Candidate Starts for HumptyDumpty_65:

(Start: 15 @45295 has 12 MA's), (Start: 25 @45331 has 4 MA's),

Gene: JaNo_65 Start: 45418, Stop: 45591, Start Num: 15

Candidate Starts for JaNo_65:

(Start: 15 @45418 has 12 MA's), (Start: 25 @45454 has 4 MA's), (27, 45469),

Gene: JanetJ_36 Start: 30129, Stop: 30284, Start Num: 21

Candidate Starts for JanetJ_36:

(9, 30009), (Start: 21 @30129 has 2 MA's), (27, 30156),

Gene: JayCookie_63 Start: 45128, Stop: 45286, Start Num: 22

Candidate Starts for JayCookie_63:

(Start: 22 @45128 has 5 MA's), (Start: 25 @45137 has 4 MA's), (30, 45188), (32, 45200), (33, 45209), (37, 45278),

Gene: KBurrousTX_62 Start: 46014, Stop: 46151, Start Num: 25
Candidate Starts for KBurrousTX_62:
(Start: 22 @46005 has 5 MA's), (Start: 25 @46014 has 4 MA's), (30, 46065), (33, 46086), (34, 46137),

Gene: Kabreeze_62 Start: 44744, Stop: 44893, Start Num: 25
Candidate Starts for Kabreeze_62:
(Start: 22 @44735 has 5 MA's), (Start: 25 @44744 has 4 MA's), (30, 44795), (32, 44807), (33, 44816),
(37, 44885),

Gene: Kabreeze_65 Start: 45374, Stop: 45547, Start Num: 15
Candidate Starts for Kabreeze_65:
(Start: 15 @45374 has 12 MA's), (Start: 25 @45410 has 4 MA's),

Gene: Klevey_70 Start: 44391, Stop: 44209, Start Num: 16
Candidate Starts for Klevey_70:
(6, 44424), (Start: 16 @44391 has 2 MA's),

Gene: Linus_65 Start: 45497, Stop: 45670, Start Num: 15
Candidate Starts for Linus_65:
(Start: 15 @45497 has 12 MA's), (23, 45530), (Start: 25 @45533 has 4 MA's), (27, 45548),

Gene: Linus_62 Start: 44867, Stop: 45016, Start Num: 25
Candidate Starts for Linus_62:
(Start: 22 @44858 has 5 MA's), (Start: 25 @44867 has 4 MA's), (30, 44918), (32, 44930), (33, 44939),
(37, 45008),

Gene: Mentos_8 Start: 2273, Stop: 2073, Start Num: 16
Candidate Starts for Mentos_8:
(7, 2399), (12, 2327), (Start: 16 @2273 has 2 MA's), (18, 2264), (20, 2252), (36, 2096),

Gene: Mordred_65 Start: 45412, Stop: 45585, Start Num: 15
Candidate Starts for Mordred_65:
(Start: 15 @45412 has 12 MA's), (Start: 25 @45448 has 4 MA's), (27, 45463),

Gene: MoyaNatalis_65 Start: 45343, Stop: 45516, Start Num: 15
Candidate Starts for MoyaNatalis_65:
(Start: 15 @45343 has 12 MA's), (Start: 25 @45379 has 4 MA's), (27, 45394),

Gene: MoyaNatalis_62 Start: 44704, Stop: 44862, Start Num: 22
Candidate Starts for MoyaNatalis_62:
(Start: 22 @44704 has 5 MA's), (Start: 25 @44713 has 4 MA's), (30, 44764), (32, 44776), (33, 44785),
(37, 44854),

Gene: MurphyJoseph_45 Start: 29289, Stop: 29453, Start Num: 19
Candidate Starts for MurphyJoseph_45:
(Start: 19 @29289 has 7 MA's),

Gene: Nandito_68 Start: 44504, Stop: 44283, Start Num: 16
Candidate Starts for Nandito_68:
(5, 44633), (6, 44543), (Start: 16 @44504 has 2 MA's),

Gene: Nikan_61 Start: 41306, Stop: 41169, Start Num: 24

Candidate Starts for Nikan_61:
(24, 41306),

Gene: Nostromo_38 Start: 31200, Stop: 31355, Start Num: 21
Candidate Starts for Nostromo_38:
(10, 31080), (Start: 21 @31200 has 2 MA's),

Gene: Prairie_67 Start: 43945, Stop: 43724, Start Num: 16
Candidate Starts for Prairie_67:
(1, 44347), (5, 44167), (6, 44077), (Start: 16 @43945 has 2 MA's),

Gene: PrincessTrina_65 Start: 45399, Stop: 45572, Start Num: 15
Candidate Starts for PrincessTrina_65:
(Start: 15 @45399 has 12 MA's), (Start: 25 @45435 has 4 MA's), (27, 45450),

Gene: RosiePosie_61 Start: 44394, Stop: 44552, Start Num: 22
Candidate Starts for RosiePosie_61:
(Start: 22 @44394 has 5 MA's), (Start: 25 @44403 has 4 MA's), (30, 44454), (32, 44466), (33, 44475),
(37, 44544),

Gene: Satrap_50 Start: 30878, Stop: 31042, Start Num: 19
Candidate Starts for Satrap_50:
(13, 30839), (Start: 19 @30878 has 7 MA's), (26, 30899),

Gene: SlySloth_8 Start: 2415, Stop: 2269, Start Num: 20
Candidate Starts for SlySloth_8:
(7, 2562), (12, 2490), (Start: 16 @2436 has 2 MA's), (18, 2427), (20, 2415),

Gene: SunnyJune_4 Start: 3451, Stop: 3597, Start Num: 19
Candidate Starts for SunnyJune_4:
(Start: 19 @3451 has 7 MA's),

Gene: Tophat_65 Start: 45332, Stop: 45505, Start Num: 15
Candidate Starts for Tophat_65:
(Start: 15 @45332 has 12 MA's), (Start: 25 @45368 has 4 MA's), (27, 45383),