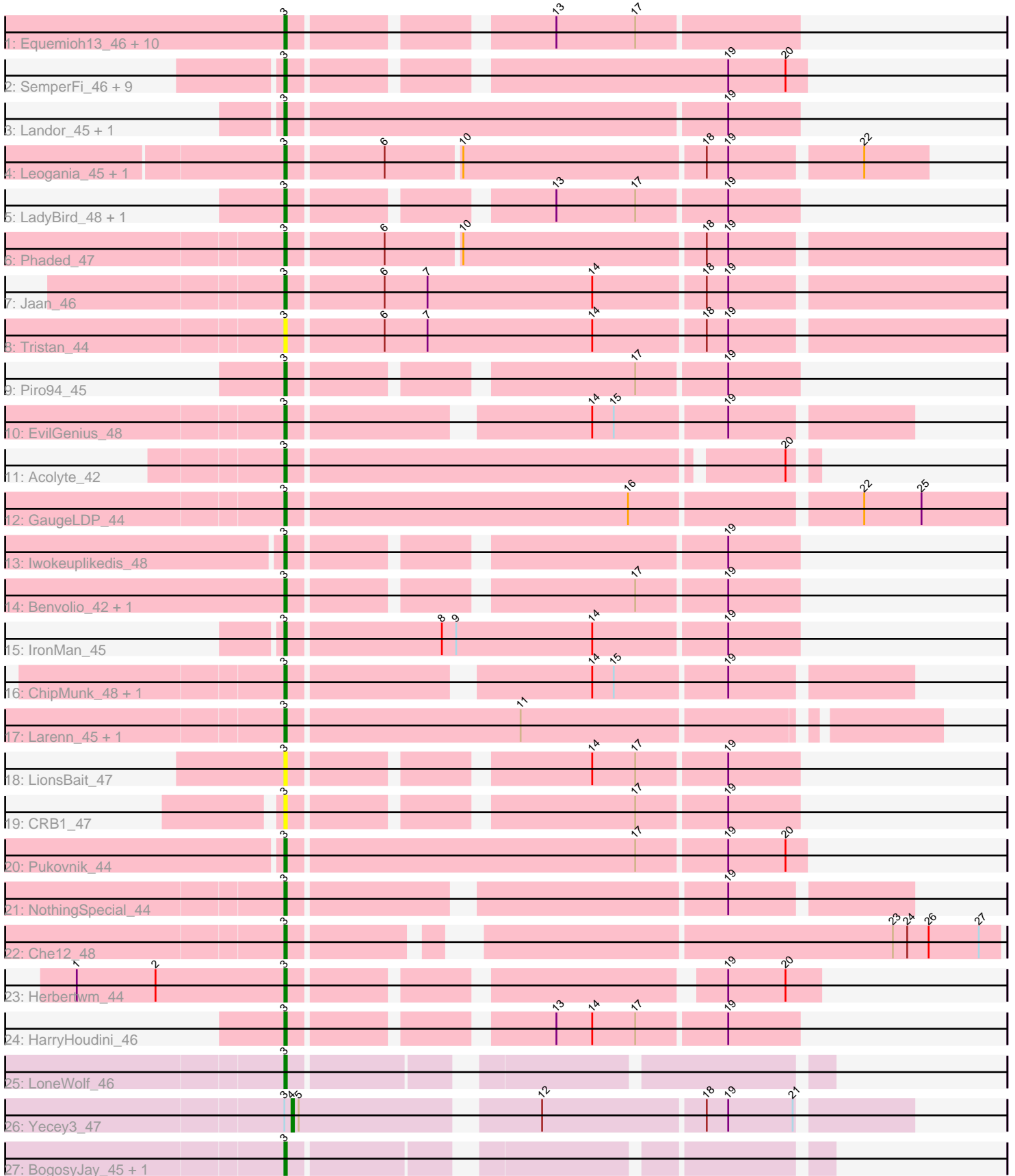


Pham 216236



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 216236 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216236 has 53 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Equemioh13\_46, Centaur\_46, Buggy\_47, NaSiaTalie\_45, MiculUcigas\_45, WideWale\_46, Sknot\_47, Gratitude\_45, Terrific\_48, Updawg\_46, Flare16\_45
- Track 2 : SemperFi\_46, Crucio\_45, Anselm\_46, Retro23\_46, Dalmatian\_46, Power\_44, Georgie2\_46, FiringLine\_45, SnapTap\_45, QueenBeesly\_45
- Track 3 : Landor\_45, Bactobuster\_44
- Track 4 : Leogania\_45, BiancaTri92\_45
- Track 5 : LadyBird\_48, Baehexic\_44
- Track 6 : Phaded\_47
- Track 7 : Jaan\_46
- Track 8 : Tristan\_44
- Track 9 : Piro94\_45
- Track 10 : EvilGenius\_48
- Track 11 : Acolyte\_42
- Track 12 : GaugeLDP\_44
- Track 13 : Iwokeuplikedis\_48
- Track 14 : Benvolio\_42, Echild\_45
- Track 15 : IronMan\_45
- Track 16 : ChipMunk\_48, KingCyrus\_48
- Track 17 : Larenn\_45, Malec\_46
- Track 18 : LionsBait\_47
- Track 19 : CRB1\_47
- Track 20 : Pukovnik\_44
- Track 21 : NothingSpecial\_44
- Track 22 : Che12\_48
- Track 23 : Herbertwm\_44
- Track 24 : HarryHoudini\_46
- Track 25 : LoneWolf\_46
- Track 26 : Yecey3\_47
- Track 27 : BogosyJay\_45, Maminiaina\_45

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

The start number called the most often in the published annotations is 3, it was called in 46 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acolyte\_42, Anselm\_46, Bactobuster\_44, Baehexic\_44, Benvolio\_42, BiancaTri92\_45, BogosyJay\_45, Buggy\_47, CRB1\_47, Centaur\_46, Che12\_48, ChipMunk\_48, Crucio\_45, Dalmatian\_46, Echild\_45, Equemioh13\_46, EvilGenius\_48, FiringLine\_45, Flare16\_45, GaugeLDP\_44, Georgie2\_46, Gratitude\_45, HarryHoudini\_46, Herbertwm\_44, IronMan\_45, Iwokeuplikedis\_48, Jaan\_46, KingCyrus\_48, LadyBird\_48, Landor\_45, Larenn\_45, Leogania\_45, LionsBait\_47, LoneWolf\_46, Malec\_46, Maminiaina\_45, MiculUcigas\_45, NaSiaTalie\_45, NothingSpecial\_44, Phaded\_47, Piro94\_45, Power\_44, Pukovnik\_44, QueenBeesly\_45, Retro23\_46, SemperFi\_46, Sknot\_47, SnapTap\_45, Terrific\_48, Tristan\_44, Updawg\_46, WideWale\_46,

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

- Yecey3\_47,

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

- 

### Summary by start number:

Start 3:

- Found in 53 of 53 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 46 of 47
- Called 98.1% of time when present
- Phage (with cluster) where this start called: Acolyte\_42 (A2), Anselm\_46 (A2), Bactobuster\_44 (A2), Baehexic\_44 (A2), Benvolio\_42 (A2), BiancaTri92\_45 (A2), BogosyJay\_45 (A9), Buggy\_47 (A2), CRB1\_47 (A2), Centaur\_46 (A2), Che12\_48 (A2), ChipMunk\_48 (A2), Crucio\_45 (A2), Dalmatian\_46 (A2), Echild\_45 (A2), Equemioh13\_46 (A2), EvilGenius\_48 (A2), FiringLine\_45 (A2), Flare16\_45 (A2), GaugeLDP\_44 (A2), Georgie2\_46 (A2), Gratitude\_45 (A2), HarryHoudini\_46 (A2), Herbertwm\_44 (A2), IronMan\_45 (A2), Iwokeuplikedis\_48 (A2), Jaan\_46 (A2), KingCyrus\_48 (A2), LadyBird\_48 (A2), Landor\_45 (A2), Larenn\_45 (A2), Leogania\_45 (A2), LionsBait\_47 (A2), LoneWolf\_46 (A9), Malec\_46 (A2), Maminiaina\_45 (A9), MiculUcigas\_45 (A2), NaSiaTalie\_45 (A2), NothingSpecial\_44 (A2), Phaded\_47 (A2), Piro94\_45 (A2), Power\_44 (A2), Pukovnik\_44 (A2), QueenBeesly\_45 (A2), Retro23\_46 (A2), SemperFi\_46 (A2), Sknot\_47 (A2), SnapTap\_45 (A2), Terrific\_48 (A2), Tristan\_44 (A2), Updawg\_46 (A2), WideWale\_46 (A2),

Start 4:

- Found in 1 of 53 ( 1.9% ) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yecey3\_47 (A9),

### Summary by clusters:

There are 2 clusters represented in this pham: A9, A2,

Info for manual annotations of cluster A2:

- Start number 3 was manually annotated 43 times for cluster A2.

Info for manual annotations of cluster A9:

- Start number 3 was manually annotated 3 times for cluster A9.
- Start number 4 was manually annotated 1 time for cluster A9.

**Gene Information:**

Gene: Acolyte\_42 Start: 31182, Stop: 30976, Start Num: 3

Candidate Starts for Acolyte\_42:

(Start: 3 @31182 has 46 MA's), (20, 30984),

Gene: Anselm\_46 Start: 31910, Stop: 31710, Start Num: 3

Candidate Starts for Anselm\_46:

(Start: 3 @31910 has 46 MA's), (19, 31742), (20, 31718),

Gene: Bactobuster\_44 Start: 32495, Stop: 32286, Start Num: 3

Candidate Starts for Bactobuster\_44:

(Start: 3 @32495 has 46 MA's), (19, 32315),

Gene: Baehexic\_44 Start: 31684, Stop: 31490, Start Num: 3

Candidate Starts for Baehexic\_44:

(Start: 3 @31684 has 46 MA's), (13, 31588), (17, 31555), (19, 31519),

Gene: Benvolio\_42 Start: 30956, Stop: 30762, Start Num: 3

Candidate Starts for Benvolio\_42:

(Start: 3 @30956 has 46 MA's), (17, 30827), (19, 30791),

Gene: BiancaTri92\_45 Start: 32306, Stop: 32052, Start Num: 3

Candidate Starts for BiancaTri92\_45:

(Start: 3 @32306 has 46 MA's), (6, 32267), (10, 32237), (18, 32138), (19, 32129), (22, 32078),

Gene: BogosyJay\_45 Start: 31543, Stop: 31346, Start Num: 3

Candidate Starts for BogosyJay\_45:

(Start: 3 @31543 has 46 MA's),

Gene: Bugsy\_47 Start: 32054, Stop: 31860, Start Num: 3

Candidate Starts for Bugsy\_47:

(Start: 3 @32054 has 46 MA's), (13, 31958), (17, 31925),

Gene: CRB1\_47 Start: 31980, Stop: 31786, Start Num: 3

Candidate Starts for CRB1\_47:

(Start: 3 @31980 has 46 MA's), (17, 31851), (19, 31815),

Gene: Centaur\_46 Start: 31901, Stop: 31707, Start Num: 3

Candidate Starts for Centaur\_46:

(Start: 3 @31901 has 46 MA's), (13, 31805), (17, 31772),

Gene: Che12\_48 Start: 30727, Stop: 30458, Start Num: 3

Candidate Starts for Che12\_48:

(Start: 3 @30727 has 46 MA's), (23, 30502), (24, 30496), (26, 30487), (27, 30466),

Gene: ChipMunk\_48 Start: 33451, Stop: 33212, Start Num: 3

Candidate Starts for ChipMunk\_48:  
(Start: 3 @33451 has 46 MA's), (14, 33337), (15, 33328), (19, 33283),

Gene: Crucio\_45 Start: 31494, Stop: 31294, Start Num: 3  
Candidate Starts for Crucio\_45:  
(Start: 3 @31494 has 46 MA's), (19, 31326), (20, 31302),

Gene: Dalmatian\_46 Start: 31886, Stop: 31686, Start Num: 3  
Candidate Starts for Dalmatian\_46:  
(Start: 3 @31886 has 46 MA's), (19, 31718), (20, 31694),

Gene: Echild\_45 Start: 30980, Stop: 30786, Start Num: 3  
Candidate Starts for Echild\_45:  
(Start: 3 @30980 has 46 MA's), (17, 30851), (19, 30815),

Gene: Equemioh13\_46 Start: 31803, Stop: 31609, Start Num: 3  
Candidate Starts for Equemioh13\_46:  
(Start: 3 @31803 has 46 MA's), (13, 31707), (17, 31674),

Gene: EvilGenius\_48 Start: 33455, Stop: 33216, Start Num: 3  
Candidate Starts for EvilGenius\_48:  
(Start: 3 @33455 has 46 MA's), (14, 33341), (15, 33332), (19, 33287),

Gene: FiringLine\_45 Start: 31475, Stop: 31275, Start Num: 3  
Candidate Starts for FiringLine\_45:  
(Start: 3 @31475 has 46 MA's), (19, 31307), (20, 31283),

Gene: Flare16\_45 Start: 31562, Stop: 31368, Start Num: 3  
Candidate Starts for Flare16\_45:  
(Start: 3 @31562 has 46 MA's), (13, 31466), (17, 31433),

Gene: GaugeLDP\_44 Start: 32036, Stop: 31746, Start Num: 3  
Candidate Starts for GaugeLDP\_44:  
(Start: 3 @32036 has 46 MA's), (16, 31895), (22, 31805), (25, 31781),

Gene: Georgie2\_46 Start: 31520, Stop: 31320, Start Num: 3  
Candidate Starts for Georgie2\_46:  
(Start: 3 @31520 has 46 MA's), (19, 31352), (20, 31328),

Gene: Gratitude\_45 Start: 31803, Stop: 31609, Start Num: 3  
Candidate Starts for Gratitude\_45:  
(Start: 3 @31803 has 46 MA's), (13, 31707), (17, 31674),

Gene: HarryHoudini\_46 Start: 32007, Stop: 31813, Start Num: 3  
Candidate Starts for HarryHoudini\_46:  
(Start: 3 @32007 has 46 MA's), (13, 31911), (14, 31896), (17, 31878), (19, 31842),

Gene: Herbertwm\_44 Start: 31136, Stop: 30939, Start Num: 3  
Candidate Starts for Herbertwm\_44:  
(1, 31223), (2, 31190), (Start: 3 @31136 has 46 MA's), (19, 30977), (20, 30953),

Gene: IronMan\_45 Start: 32678, Stop: 32469, Start Num: 3  
Candidate Starts for IronMan\_45:

(Start: 3 @32678 has 46 MA's), (8, 32615), (9, 32609), (14, 32552), (19, 32498),

Gene: Iwokeuplikedis\_48 Start: 31606, Stop: 31412, Start Num: 3

Candidate Starts for Iwokeuplikedis\_48:

(Start: 3 @31606 has 46 MA's), (19, 31441),

Gene: Jaan\_46 Start: 33047, Stop: 32757, Start Num: 3

Candidate Starts for Jaan\_46:

(Start: 3 @33047 has 46 MA's), (6, 33008), (7, 32990), (14, 32921), (18, 32876), (19, 32867),

Gene: KingCyrus\_48 Start: 33450, Stop: 33211, Start Num: 3

Candidate Starts for KingCyrus\_48:

(Start: 3 @33450 has 46 MA's), (14, 33336), (15, 33327), (19, 33282),

Gene: LadyBird\_48 Start: 31939, Stop: 31745, Start Num: 3

Candidate Starts for LadyBird\_48:

(Start: 3 @31939 has 46 MA's), (13, 31843), (17, 31810), (19, 31774),

Gene: Landor\_45 Start: 32756, Stop: 32547, Start Num: 3

Candidate Starts for Landor\_45:

(Start: 3 @32756 has 46 MA's), (19, 32576),

Gene: Larenn\_45 Start: 31865, Stop: 31608, Start Num: 3

Candidate Starts for Larenn\_45:

(Start: 3 @31865 has 46 MA's), (11, 31769),

Gene: Leogania\_45 Start: 32673, Stop: 32419, Start Num: 3

Candidate Starts for Leogania\_45:

(Start: 3 @32673 has 46 MA's), (6, 32634), (10, 32604), (18, 32505), (19, 32496), (22, 32445),

Gene: LionsBait\_47 Start: 33023, Stop: 32829, Start Num: 3

Candidate Starts for LionsBait\_47:

(Start: 3 @33023 has 46 MA's), (14, 32912), (17, 32894), (19, 32858),

Gene: LoneWolf\_46 Start: 31502, Stop: 31302, Start Num: 3

Candidate Starts for LoneWolf\_46:

(Start: 3 @31502 has 46 MA's),

Gene: Malec\_46 Start: 32429, Stop: 32172, Start Num: 3

Candidate Starts for Malec\_46:

(Start: 3 @32429 has 46 MA's), (11, 32333),

Gene: Maminiaina\_45 Start: 31525, Stop: 31328, Start Num: 3

Candidate Starts for Maminiaina\_45:

(Start: 3 @31525 has 46 MA's),

Gene: MiculUcigas\_45 Start: 31462, Stop: 31268, Start Num: 3

Candidate Starts for MiculUcigas\_45:

(Start: 3 @31462 has 46 MA's), (13, 31366), (17, 31333),

Gene: NaSiaTalie\_45 Start: 31559, Stop: 31365, Start Num: 3

Candidate Starts for NaSiaTalie\_45:

(Start: 3 @31559 has 46 MA's), (13, 31463), (17, 31430),

Gene: NothingSpecial\_44 Start: 32271, Stop: 32032, Start Num: 3  
Candidate Starts for NothingSpecial\_44:  
(Start: 3 @32271 has 46 MA's), (19, 32103),

Gene: Phaded\_47 Start: 32920, Stop: 32633, Start Num: 3  
Candidate Starts for Phaded\_47:  
(Start: 3 @32920 has 46 MA's), (6, 32881), (10, 32851), (18, 32752), (19, 32743),

Gene: Piro94\_45 Start: 31924, Stop: 31730, Start Num: 3  
Candidate Starts for Piro94\_45:  
(Start: 3 @31924 has 46 MA's), (17, 31795), (19, 31759),

Gene: Power\_44 Start: 31528, Stop: 31328, Start Num: 3  
Candidate Starts for Power\_44:  
(Start: 3 @31528 has 46 MA's), (19, 31360), (20, 31336),

Gene: Pukovnik\_44 Start: 32346, Stop: 32134, Start Num: 3  
Candidate Starts for Pukovnik\_44:  
(Start: 3 @32346 has 46 MA's), (17, 32202), (19, 32166), (20, 32142),

Gene: QueenBeesly\_45 Start: 31475, Stop: 31275, Start Num: 3  
Candidate Starts for QueenBeesly\_45:  
(Start: 3 @31475 has 46 MA's), (19, 31307), (20, 31283),

Gene: Retro23\_46 Start: 31882, Stop: 31682, Start Num: 3  
Candidate Starts for Retro23\_46:  
(Start: 3 @31882 has 46 MA's), (19, 31714), (20, 31690),

Gene: SemperFi\_46 Start: 31743, Stop: 31543, Start Num: 3  
Candidate Starts for SemperFi\_46:  
(Start: 3 @31743 has 46 MA's), (19, 31575), (20, 31551),

Gene: Sknot\_47 Start: 31562, Stop: 31368, Start Num: 3  
Candidate Starts for Sknot\_47:  
(Start: 3 @31562 has 46 MA's), (13, 31466), (17, 31433),

Gene: SnapTap\_45 Start: 31554, Stop: 31354, Start Num: 3  
Candidate Starts for SnapTap\_45:  
(Start: 3 @31554 has 46 MA's), (19, 31386), (20, 31362),

Gene: Terrific\_48 Start: 31916, Stop: 31722, Start Num: 3  
Candidate Starts for Terrific\_48:  
(Start: 3 @31916 has 46 MA's), (13, 31820), (17, 31787),

Gene: Tristan\_44 Start: 32727, Stop: 32437, Start Num: 3  
Candidate Starts for Tristan\_44:  
(Start: 3 @32727 has 46 MA's), (6, 32688), (7, 32670), (14, 32601), (18, 32556), (19, 32547),

Gene: Updawg\_46 Start: 31803, Stop: 31609, Start Num: 3  
Candidate Starts for Updawg\_46:  
(Start: 3 @31803 has 46 MA's), (13, 31707), (17, 31674),

Gene: WideWale\_46 Start: 31803, Stop: 31609, Start Num: 3

Candidate Starts for WideWale\_46:

(Start: 3 @31803 has 46 MA's), (13, 31707), (17, 31674),

Gene: Yecey3\_47 Start: 31235, Stop: 30996, Start Num: 4

Candidate Starts for Yecey3\_47:

(Start: 3 @31238 has 46 MA's), (Start: 4 @31235 has 1 MA's), (5, 31232), (12, 31142), (18, 31076),  
(19, 31067), (21, 31040),