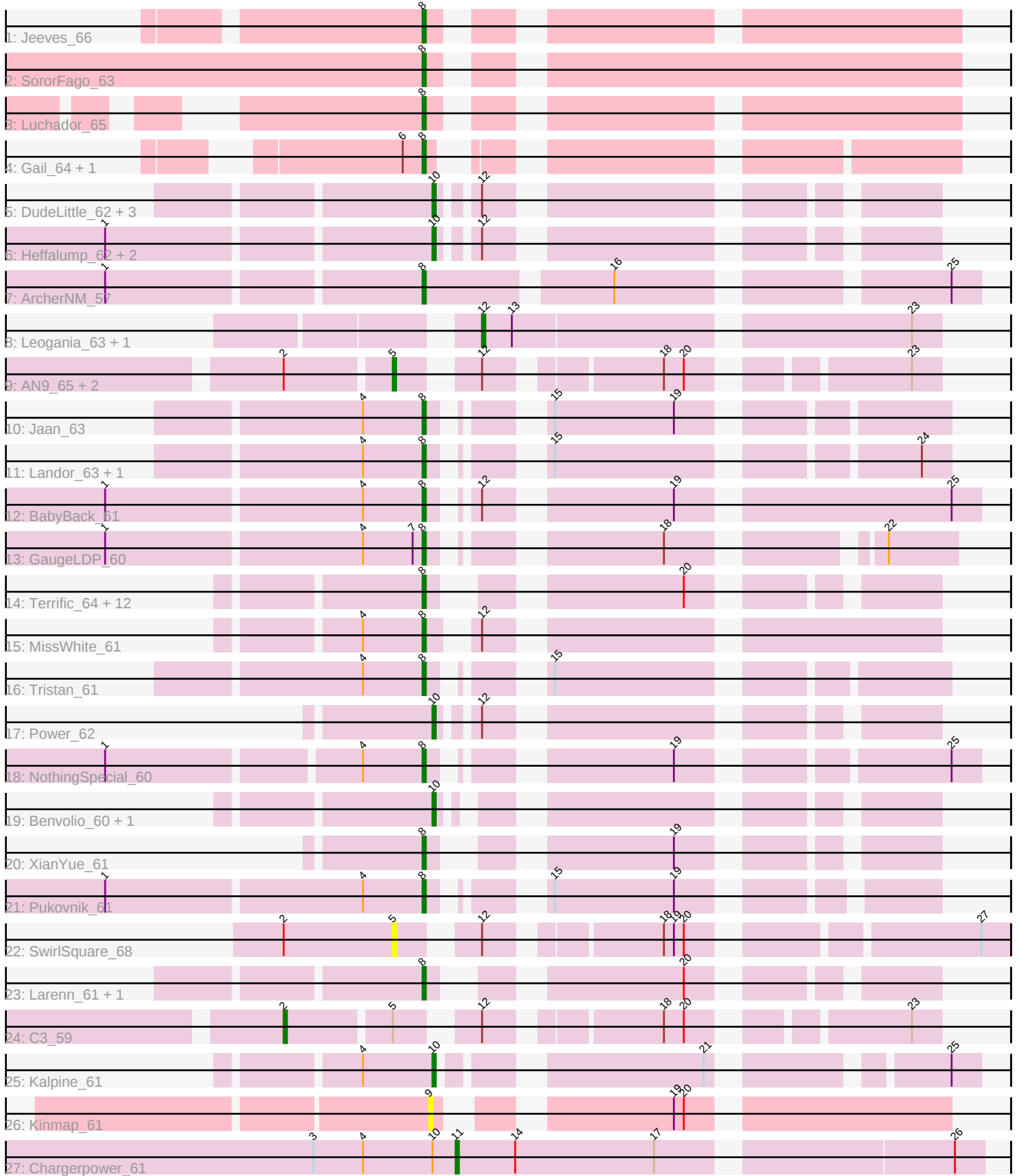




Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 280529 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280529 has 51 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Jeeves_66
- Track 2 : SororFago_63
- Track 3 : Luchador_65
- Track 4 : Gail_64, Sunhee_65
- Track 5 : DudeLittle_62, Retro23_64, Anselm_64, Dalmatian_64
- Track 6 : Heffalump_62, Fameo_63, QueenB2_62
- Track 7 : ArcherNM_57
- Track 8 : Leogania_63, BiancaTri92_63
- Track 9 : AN9_65, ANI8_65, VC3_65
- Track 10 : Jaan_63
- Track 11 : Landor_63, IronMan_62
- Track 12 : BabyBack_61
- Track 13 : GaugeLDP_60
- Track 14 : Terrific_64, MiculUcigas_63, WideWale_64, Piro94_63, Baehexic_62, Equemioh13_63, NaSiaTalie_63, Sknot_63, Centaur_64, Gratitude_61, Updawg_64, Flare16_63, HarryHoudini_64
- Track 15 : MissWhite_61
- Track 16 : Tristan_61
- Track 17 : Power_62
- Track 18 : NothingSpecial_60
- Track 19 : Benvolio_60, Echild_63
- Track 20 : XianYue_61
- Track 21 : Pukovnik_61
- Track 22 : SwirlSquare_68
- Track 23 : Larenn_61, Malec_62
- Track 24 : C3_59
- Track 25 : Kalpine_61
- Track 26 : Kinmap_61
- Track 27 : Chargerpower_61

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

The start number called the most often in the published annotations is 8, it was called in 28 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ArcherNM_57, BabyBack_61, Baehexic_62, Centaur_64, Equemioh13_63, Flare16_63, Gail_64, GaugeLDP_60, Gratitude_61, HarryHoudini_64, IronMan_62, Jaan_63, Jeeves_66, Landor_63, Larenn_61, Luchador_65, Malec_62, MiculUcigas_63, MissWhite_61, NaSiaTalie_63, NothingSpecial_60, Piro94_63, Pukovnik_61, Sknot_63, SororFago_63, Sunhee_65, Terrific_64, Tristan_61, Updawg_64, WideWale_64, XianYue_61,

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

•

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

• AN9_65, ANI8_65, Anselm_64, Benvolio_60, BiancaTri92_63, C3_59, Chargerpower_61, Dalmatian_64, DudeLittle_62, Echid_63, Fameo_63, Heffalump_62, Kalpine_61, Kinmap_61, Leogania_63, Power_62, QueenB2_62, Retro23_64, SwirlSquare_68, VC3_65,

Summary by start number:

Start 2:

- Found in 5 of 51 (9.8%) of genes in pham
- Manual Annotations of this start: 1 of 46
- Called 20.0% of time when present
- Phage (with cluster) where this start called: C3_59 (A2),

Start 5:

- Found in 5 of 51 (9.8%) of genes in pham
- Manual Annotations of this start: 3 of 46
- Called 80.0% of time when present
- Phage (with cluster) where this start called: AN9_65 (A2), ANI8_65 (A2), SwirlSquare_68 (A2), VC3_65 (A2),

Start 8:

- Found in 31 of 51 (60.8%) of genes in pham
- Manual Annotations of this start: 28 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArcherNM_57 (A2), BabyBack_61 (A2), Baehexic_62 (A2), Centaur_64 (A2), Equemioh13_63 (A2), Flare16_63 (A2), Gail_64 (A14), GaugeLDP_60 (A2), Gratitude_61 (A2), HarryHoudini_64 (A2), IronMan_62 (A2), Jaan_63 (A2), Jeeves_66 (A14), Landor_63 (A2), Larenn_61 (A2), Luchador_65 (A14), Malec_62 (A2), MiculUcigas_63 (A2), MissWhite_61 (A2), NaSiaTalie_63 (A2), NothingSpecial_60 (A2), Piro94_63 (A2), Pukovnik_61 (A2), Sknot_63 (A2), SororFago_63 (A14), Sunhee_65 (A14), Terrific_64 (A2), Tristan_61 (A2), Updawg_64 (A2), WideWale_64 (A2), XianYue_61 (A2),

Start 9:

- Found in 1 of 51 (2.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kinmap_61 (A21),

Start 10:

- Found in 12 of 51 (23.5%) of genes in pham
- Manual Annotations of this start: 11 of 46
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Anselm_64 (A2), Benvolio_60 (A2), Dalmatian_64 (A2), DudeLittle_62 (A2), Echild_63 (A2), Fameo_63 (A2), Heffalump_62 (A2), Kalpine_61 (A2), Power_62 (A2), QueenB2_62 (A2), Retro23_64 (A2),

Start 11:

- Found in 1 of 51 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chargerpower_61 (A22),

Start 12:

- Found in 17 of 51 (33.3%) of genes in pham
- Manual Annotations of this start: 2 of 46
- Called 11.8% of time when present
- Phage (with cluster) where this start called: BiancaTri92_63 (A2), Leogania_63 (A2),

Summary by clusters:

There are 4 clusters represented in this pham: A14, A22, A2, A21,

Info for manual annotations of cluster A14:

- Start number 8 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A2:

- Start number 2 was manually annotated 1 time for cluster A2.
- Start number 5 was manually annotated 3 times for cluster A2.
- Start number 8 was manually annotated 24 times for cluster A2.
- Start number 10 was manually annotated 11 times for cluster A2.
- Start number 12 was manually annotated 2 times for cluster A2.

Info for manual annotations of cluster A22:

- Start number 11 was manually annotated 1 time for cluster A22.

Gene Information:

Gene: AN9_65 Start: 40106, Stop: 39975, Start Num: 5

Candidate Starts for AN9_65:

(Start: 2 @40136 has 1 MA's), (Start: 5 @40106 has 3 MA's), (Start: 12 @40088 has 2 MA's), (18, 40043), (20, 40037), (23, 39983),

Gene: ANI8_65 Start: 40106, Stop: 39975, Start Num: 5

Candidate Starts for ANI8_65:

(Start: 2 @40136 has 1 MA's), (Start: 5 @40106 has 3 MA's), (Start: 12 @40088 has 2 MA's), (18, 40043), (20, 40037), (23, 39983),

Gene: Anselm_64 Start: 40239, Stop: 40120, Start Num: 10

Candidate Starts for Anselm_64:

(Start: 10 @40239 has 11 MA's), (Start: 12 @40230 has 2 MA's),

Gene: ArcherNM_57 Start: 39573, Stop: 39427, Start Num: 8

Candidate Starts for ArcherNM_57:

(1, 39663), (Start: 8 @39573 has 28 MA's), (16, 39522), (25, 39435),

Gene: BabyBack_61 Start: 40331, Stop: 40191, Start Num: 8

Candidate Starts for BabyBack_61:

(1, 40424), (4, 40349), (Start: 8 @40331 has 28 MA's), (Start: 12 @40322 has 2 MA's), (19, 40274), (25, 40199),

Gene: Baehexic_62 Start: 39801, Stop: 39685, Start Num: 8

Candidate Starts for Baehexic_62:

(Start: 8 @39801 has 28 MA's), (20, 39744),

Gene: Benvolio_60 Start: 39343, Stop: 39227, Start Num: 10

Candidate Starts for Benvolio_60:

(Start: 10 @39343 has 11 MA's),

Gene: BiancaTri92_63 Start: 40390, Stop: 40262, Start Num: 12

Candidate Starts for BiancaTri92_63:

(Start: 12 @40390 has 2 MA's), (13, 40381), (23, 40270),

Gene: C3_59 Start: 40136, Stop: 39975, Start Num: 2

Candidate Starts for C3_59:

(Start: 2 @40136 has 1 MA's), (Start: 5 @40106 has 3 MA's), (Start: 12 @40088 has 2 MA's), (18, 40043), (20, 40037), (23, 39983),

Gene: Centaur_64 Start: 40015, Stop: 39899, Start Num: 8

Candidate Starts for Centaur_64:

(Start: 8 @40015 has 28 MA's), (20, 39958),

Gene: Chargerpower_61 Start: 38578, Stop: 38429, Start Num: 11

Candidate Starts for Chargerpower_61:

(3, 38617), (4, 38602), (Start: 10 @38581 has 11 MA's), (Start: 11 @38578 has 1 MA's), (14, 38560), (17, 38518), (26, 38437),

Gene: Dalmatian_64 Start: 40212, Stop: 40093, Start Num: 10

Candidate Starts for Dalmatian_64:

(Start: 10 @40212 has 11 MA's), (Start: 12 @40203 has 2 MA's),

Gene: DudeLittle_62 Start: 39978, Stop: 39859, Start Num: 10

Candidate Starts for DudeLittle_62:

(Start: 10 @39978 has 11 MA's), (Start: 12 @39969 has 2 MA's),

Gene: Echild_63 Start: 39367, Stop: 39251, Start Num: 10

Candidate Starts for Echild_63:

(Start: 10 @39367 has 11 MA's),

Gene: Equemioh13_63 Start: 39920, Stop: 39804, Start Num: 8

Candidate Starts for Equemioh13_63:

(Start: 8 @39920 has 28 MA's), (20, 39863),

Gene: Fameo_63 Start: 40337, Stop: 40218, Start Num: 10
Candidate Starts for Fameo_63:
(1, 40430), (Start: 10 @40337 has 11 MA's), (Start: 12 @40328 has 2 MA's),

Gene: Flare16_63 Start: 39676, Stop: 39560, Start Num: 8
Candidate Starts for Flare16_63:
(Start: 8 @39676 has 28 MA's), (20, 39619),

Gene: Gail_64 Start: 40781, Stop: 40653, Start Num: 8
Candidate Starts for Gail_64:
(6, 40787), (Start: 8 @40781 has 28 MA's),

Gene: GaugeLDP_60 Start: 39857, Stop: 39732, Start Num: 8
Candidate Starts for GaugeLDP_60:
(1, 39950), (4, 39875), (7, 39860), (Start: 8 @39857 has 28 MA's), (18, 39803), (22, 39752),

Gene: Gratitude_61 Start: 39920, Stop: 39804, Start Num: 8
Candidate Starts for Gratitude_61:
(Start: 8 @39920 has 28 MA's), (20, 39863),

Gene: HarryHoudini_64 Start: 40119, Stop: 40003, Start Num: 8
Candidate Starts for HarryHoudini_64:
(Start: 8 @40119 has 28 MA's), (20, 40062),

Gene: Heffalump_62 Start: 40805, Stop: 40686, Start Num: 10
Candidate Starts for Heffalump_62:
(1, 40898), (Start: 10 @40805 has 11 MA's), (Start: 12 @40796 has 2 MA's),

Gene: IronMan_62 Start: 40812, Stop: 40687, Start Num: 8
Candidate Starts for IronMan_62:
(4, 40830), (Start: 8 @40812 has 28 MA's), (15, 40791), (24, 40695),

Gene: Jaan_63 Start: 40984, Stop: 40859, Start Num: 8
Candidate Starts for Jaan_63:
(4, 41002), (Start: 8 @40984 has 28 MA's), (15, 40963), (19, 40927),

Gene: Jeeves_66 Start: 39766, Stop: 39632, Start Num: 8
Candidate Starts for Jeeves_66:
(Start: 8 @39766 has 28 MA's),

Gene: Kalpine_61 Start: 40096, Stop: 39965, Start Num: 10
Candidate Starts for Kalpine_61:
(4, 40117), (Start: 10 @40096 has 11 MA's), (21, 40030), (25, 39973),

Gene: Kinmap_61 Start: 38456, Stop: 38328, Start Num: 9
Candidate Starts for Kinmap_61:
(9, 38456), (19, 38402), (20, 38399),

Gene: Landor_63 Start: 40890, Stop: 40765, Start Num: 8
Candidate Starts for Landor_63:
(4, 40908), (Start: 8 @40890 has 28 MA's), (15, 40869), (24, 40773),

Gene: Larenn_61 Start: 39953, Stop: 39837, Start Num: 8

Candidate Starts for Larenn_61:

(Start: 8 @39953 has 28 MA's), (20, 39896),

Gene: Leogania_63 Start: 40768, Stop: 40640, Start Num: 12

Candidate Starts for Leogania_63:

(Start: 12 @40768 has 2 MA's), (13, 40759), (23, 40648),

Gene: Luchador_65 Start: 41349, Stop: 41215, Start Num: 8

Candidate Starts for Luchador_65:

(Start: 8 @41349 has 28 MA's),

Gene: Malec_62 Start: 40520, Stop: 40404, Start Num: 8

Candidate Starts for Malec_62:

(Start: 8 @40520 has 28 MA's), (20, 40463),

Gene: MiculUcigas_63 Start: 39579, Stop: 39463, Start Num: 8

Candidate Starts for MiculUcigas_63:

(Start: 8 @39579 has 28 MA's), (20, 39522),

Gene: MissWhite_61 Start: 38488, Stop: 38360, Start Num: 8

Candidate Starts for MissWhite_61:

(4, 38506), (Start: 8 @38488 has 28 MA's), (Start: 12 @38479 has 2 MA's),

Gene: NaSiaTalie_63 Start: 39673, Stop: 39557, Start Num: 8

Candidate Starts for NaSiaTalie_63:

(Start: 8 @39673 has 28 MA's), (20, 39616),

Gene: NothingSpecial_60 Start: 40211, Stop: 40077, Start Num: 8

Candidate Starts for NothingSpecial_60:

(1, 40301), (4, 40229), (Start: 8 @40211 has 28 MA's), (19, 40154), (25, 40085),

Gene: Piro94_63 Start: 40026, Stop: 39910, Start Num: 8

Candidate Starts for Piro94_63:

(Start: 8 @40026 has 28 MA's), (20, 39969),

Gene: Power_62 Start: 40040, Stop: 39921, Start Num: 10

Candidate Starts for Power_62:

(Start: 10 @40040 has 11 MA's), (Start: 12 @40031 has 2 MA's),

Gene: Pukovnik_61 Start: 40533, Stop: 40414, Start Num: 8

Candidate Starts for Pukovnik_61:

(1, 40626), (4, 40551), (Start: 8 @40533 has 28 MA's), (15, 40512), (19, 40476),

Gene: QueenB2_62 Start: 40018, Stop: 39899, Start Num: 10

Candidate Starts for QueenB2_62:

(1, 40111), (Start: 10 @40018 has 11 MA's), (Start: 12 @40009 has 2 MA's),

Gene: Retro23_64 Start: 40232, Stop: 40113, Start Num: 10

Candidate Starts for Retro23_64:

(Start: 10 @40232 has 11 MA's), (Start: 12 @40223 has 2 MA's),

Gene: Sknot_63 Start: 39676, Stop: 39560, Start Num: 8

Candidate Starts for Sknot_63:
(Start: 8 @39676 has 28 MA's), (20, 39619),

Gene: SororFago_63 Start: 40687, Stop: 40544, Start Num: 8
Candidate Starts for SororFago_63:
(Start: 8 @40687 has 28 MA's),

Gene: Sunhee_65 Start: 39237, Stop: 39109, Start Num: 8
Candidate Starts for Sunhee_65:
(6, 39243), (Start: 8 @39237 has 28 MA's),

Gene: SwirlSquare_68 Start: 39598, Stop: 39446, Start Num: 5
Candidate Starts for SwirlSquare_68:
(Start: 2 @39631 has 1 MA's), (Start: 5 @39598 has 3 MA's), (Start: 12 @39580 has 2 MA's), (18, 39535), (19, 39532), (20, 39529), (27, 39454),

Gene: Terrific_64 Start: 40030, Stop: 39914, Start Num: 8
Candidate Starts for Terrific_64:
(Start: 8 @40030 has 28 MA's), (20, 39973),

Gene: Tristan_61 Start: 40709, Stop: 40584, Start Num: 8
Candidate Starts for Tristan_61:
(4, 40727), (Start: 8 @40709 has 28 MA's), (15, 40688),

Gene: Updawg_64 Start: 39920, Stop: 39804, Start Num: 8
Candidate Starts for Updawg_64:
(Start: 8 @39920 has 28 MA's), (20, 39863),

Gene: VC3_65 Start: 40106, Stop: 39975, Start Num: 5
Candidate Starts for VC3_65:
(Start: 2 @40136 has 1 MA's), (Start: 5 @40106 has 3 MA's), (Start: 12 @40088 has 2 MA's), (18, 40043), (20, 40037), (23, 39983),

Gene: WideWale_64 Start: 39920, Stop: 39804, Start Num: 8
Candidate Starts for WideWale_64:
(Start: 8 @39920 has 28 MA's), (20, 39863),

Gene: XianYue_61 Start: 39423, Stop: 39307, Start Num: 8
Candidate Starts for XianYue_61:
(Start: 8 @39423 has 28 MA's), (19, 39369),