

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 296566 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296566 has 65 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Austin_15
- Track 2 : Amore2_15
- Track 3 : GTE7_6
- Track 4 : Adgers_14, Barbochs_13, Boneham_13, Jellybones_13, Sam12_13, Breezic_13, BirksAndSocks_13, John316_13, Beaver_13, Ekhein_13
- Track 5 : SteveFrench_12, RoyalG_14
- Track 6 : Squibbles_13, Flakey_13, Linetti_14, Lizzo_13, GourdThymes_13, Hotorobo_13
- Track 7 : Chelms_13
- Track 8 : Eggsie_13
- Track 9 : BenoitCattle_13
- Track 10 : Diabla_12
- Track 11 : PierreThree_13
- Track 12 : PokyPuppy_12
- Track 13 : Damp_10, Teal_10, GalacticEye_10, Guillaume_10, MrWormie_10, Newt_10, Minos_10, Nimi13_10, Sticker17_10, Jormungandr_10, Charianelly_10
- Track 14 : Woes_10, Shelley_10, Berries_10, Kaseim_10, Lidong_10
- Track 15 : Hail2Pitt_10, Jams_10, Harambe_10, Lahirium_10, Anamika_10, Neoevie_10
- Track 16 : Luker_10
- Track 17 : Kvothe_13, Teatealatte_13, Tredge_13, Niagara_13
- Track 18 : Philon9_14, Vitaenoi_14
- Track 19 : ASerpRocky_13
- Track 20 : Benczkowski14_13, Katyusha_13
- Track 21 : Teech_13
- Track 22 : Hollow_13
- Track 23 : Demosthenes_13
- Track 24 : DocB7_009
- Track 25 : Mbo2_9
- Track 26 : Trogglehumper_31

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

The start number called the most often in the published annotations is 10, it was called in 48 of the 62 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adgers_14, Amore2_15, Anamika_10, Austin_15, Barbochs_13, Beaver_13, BenoitCattle_13, Berries_10, BirksAndSocks_13, Boneham_13, Breezic_13, Charianelly_10, Chelms_13, Damp_10, Diabla_12, Eggsie_13, Ekhein_13, Flakey_13, GTE7_6, GalacticEye_10, GourdThymes_13, Guillaume_10, Hail2Pitt_10, Harambe_10, Hotorobo_13, Jams_10, Jellybones_13, John316_13, Jormungandr_10, Kaseim_10, Lahirium_10, Lidong_10, Linetti_14, Lizzo_13, Minos_10, MrWormie_10, Neoevie_10, Newt_10, Nimi13_10, PierreThree_13, PokyPuppy_12, RoyalG_14, Sam12_13, Shelley_10, Squibbles_13, SteveFrench_12, Sticker17_10, Teal_10, Woes_10,

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

- Luker_10,

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

- ASerpRocky_13, Benczkowski14_13, Demosthenes_13, DocB7_009, Hollow_13, Katyusha_13, Kvothe_13, Mbo2_9, Niagara_13, Philon9_14, Teatealatte_13, Teech_13, Tredge_13, Trogglehumper_31, Vitaenoi_14,

Summary by start number:

Start 5:

- Found in 25 of 65 (38.5%) of genes in pham
- Manual Annotations of this start: 1 of 62
- Called 4.0% of time when present
- Phage (with cluster) where this start called: Luker_10 (CS3),

Start 8:

- Found in 12 of 65 (18.5%) of genes in pham
- Manual Annotations of this start: 12 of 62
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_13 (CS4), Benczkowski14_13 (CS4), Demosthenes_13 (CS4), Hollow_13 (CS4), Katyusha_13 (CS4), Kvothe_13 (CS4), Niagara_13 (CS4), Philon9_14 (CS4), Teatealatte_13 (CS4), Teech_13 (CS4), Tredge_13 (CS4), Vitaenoi_14 (CS4),

Start 9:

- Found in 1 of 65 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 62
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trogglehumper_31 (singleton),

Start 10:

- Found in 50 of 65 (76.9%) of genes in pham
- Manual Annotations of this start: 48 of 62
- Called 98.0% of time when present
- Phage (with cluster) where this start called: Adgers_14 (CS2), Amore2_15 (CS1), Anamika_10 (CS3), Austin_15 (CS1), Barbochs_13 (CS2), Beaver_13 (CS2), BenoitCattle_13 (CS2), Berries_10 (CS3), BirksAndSocks_13 (CS2), Boneham_13 (CS2), Breezic_13 (CS2), Charianelly_10 (CS3), Chelms_13 (CS2), Damp_10 (CS3),

Diabla_12 (CS2), Eggsie_13 (CS2), Ekhein_13 (CS2), Flakey_13 (CS2), GTE7_6 (CS1), GalacticEye_10 (CS3), GourdThymes_13 (CS2), Guillaume_10 (CS3), Hail2Pitt_10 (CS3), Harambe_10 (CS3), Hotorobo_13 (CS2), Jams_10 (CS3), Jellybones_13 (CS2), John316_13 (CS2), Jormungandr_10 (CS3), Kaseim_10 (CS3), Lahirium_10 (CS3), Lidong_10 (CS3), Linetti_14 (CS2), Lizzo_13 (CS2), Minos_10 (CS3), MrWormie_10 (CS3), Neoevie_10 (CS3), Newt_10 (CS3), Nimi13_10 (CS3), PierreThree_13 (CS2), PokyPuppy_12 (CS2), RoyalG_14 (CS2), Sam12_13 (CS2), Shelley_10 (CS3), Squibbles_13 (CS2), SteveFrench_12 (CS2), Sticker17_10 (CS3), Teal_10 (CS3), Woes_10 (CS3),

Start 11:

- Found in 1 of 65 (1.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mbo2_9 (singleton),

Start 12:

- Found in 1 of 65 (1.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DocB7_009 (singleton),

Summary by clusters:

There are 5 clusters represented in this pham: CS4, singleton, CS1, CS3, CS2,

Info for manual annotations of cluster CS1:

- Start number 10 was manually annotated 2 times for cluster CS1.

Info for manual annotations of cluster CS2:

- Start number 10 was manually annotated 24 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 5 was manually annotated 1 time for cluster CS3.
- Start number 10 was manually annotated 22 times for cluster CS3.

Info for manual annotations of cluster CS4:

- Start number 8 was manually annotated 12 times for cluster CS4.

Gene Information:

Gene: ASerpRocky_13 Start: 14958, Stop: 15266, Start Num: 8

Candidate Starts for ASerpRocky_13:

(Start: 8 @14958 has 12 MA's), (28, 15156), (32, 15189), (39, 15237),

Gene: Adgers_14 Start: 12592, Stop: 12897, Start Num: 10

Candidate Starts for Adgers_14:

(Start: 10 @12592 has 48 MA's), (15, 12646), (19, 12727), (29, 12790), (39, 12868),

Gene: Amore2_15 Start: 12500, Stop: 12805, Start Num: 10

Candidate Starts for Amore2_15:

(Start: 10 @12500 has 48 MA's), (15, 12554), (29, 12698), (33, 12731), (36, 12746), (39, 12776),

Gene: Anamika_10 Start: 13516, Stop: 13821, Start Num: 10

Candidate Starts for Anamika_10:

(Start: 5 @13483 has 1 MA's), (6, 13489), (Start: 10 @13516 has 48 MA's), (19, 13651), (24, 13687), (29, 13714), (39, 13792),

Gene: Austin_15 Start: 12500, Stop: 12805, Start Num: 10

Candidate Starts for Austin_15:

(Start: 10 @12500 has 48 MA's), (29, 12698), (33, 12731), (36, 12746), (39, 12776),

Gene: Barbochs_13 Start: 12430, Stop: 12735, Start Num: 10

Candidate Starts for Barbochs_13:

(Start: 10 @12430 has 48 MA's), (15, 12484), (19, 12565), (29, 12628), (39, 12706),

Gene: Beaver_13 Start: 12438, Stop: 12743, Start Num: 10

Candidate Starts for Beaver_13:

(Start: 10 @12438 has 48 MA's), (15, 12492), (19, 12573), (29, 12636), (39, 12714),

Gene: Benczkowski14_13 Start: 15021, Stop: 15329, Start Num: 8

Candidate Starts for Benczkowski14_13:

(Start: 8 @15021 has 12 MA's), (16, 15093), (22, 15177), (27, 15216), (28, 15219), (32, 15252), (38, 15288), (39, 15300),

Gene: BenoitCattle_13 Start: 12430, Stop: 12735, Start Num: 10

Candidate Starts for BenoitCattle_13:

(2, 12307), (Start: 10 @12430 has 48 MA's), (15, 12484), (19, 12565), (29, 12628), (39, 12706),

Gene: Berries_10 Start: 13501, Stop: 13806, Start Num: 10

Candidate Starts for Berries_10:

(Start: 5 @13468 has 1 MA's), (6, 13474), (Start: 10 @13501 has 48 MA's), (19, 13636), (24, 13672), (29, 13699), (39, 13777),

Gene: BirksAndSocks_13 Start: 12427, Stop: 12732, Start Num: 10

Candidate Starts for BirksAndSocks_13:

(Start: 10 @12427 has 48 MA's), (15, 12481), (19, 12562), (29, 12625), (39, 12703),

Gene: Boneham_13 Start: 12426, Stop: 12731, Start Num: 10

Candidate Starts for Boneham_13:

(Start: 10 @12426 has 48 MA's), (15, 12480), (19, 12561), (29, 12624), (39, 12702),

Gene: Breezic_13 Start: 12441, Stop: 12746, Start Num: 10

Candidate Starts for Breezic_13:

(Start: 10 @12441 has 48 MA's), (15, 12495), (19, 12576), (29, 12639), (39, 12717),

Gene: Charianelly_10 Start: 13233, Stop: 13538, Start Num: 10

Candidate Starts for Charianelly_10:

(Start: 5 @13200 has 1 MA's), (6, 13206), (Start: 10 @13233 has 48 MA's), (19, 13368), (24, 13404), (29, 13431), (39, 13509),

Gene: Chelms_13 Start: 12432, Stop: 12737, Start Num: 10

Candidate Starts for Chelms_13:

(3, 12315), (4, 12336), (Start: 10 @12432 has 48 MA's), (15, 12486), (29, 12630), (39, 12708),

Gene: Damp_10 Start: 12397, Stop: 12702, Start Num: 10
Candidate Starts for Damp_10:
(Start: 5 @12364 has 1 MA's), (6, 12370), (Start: 10 @12397 has 48 MA's), (19, 12532), (24, 12568),
(29, 12595), (39, 12673),

Gene: Demosthenes_13 Start: 14928, Stop: 15236, Start Num: 8
Candidate Starts for Demosthenes_13:
(Start: 8 @14928 has 12 MA's), (22, 15084), (27, 15123), (28, 15126), (32, 15159), (39, 15207),

Gene: Diabla_12 Start: 12248, Stop: 12553, Start Num: 10
Candidate Starts for Diabla_12:
(Start: 10 @12248 has 48 MA's), (39, 12524),

Gene: DocB7_009 Start: 10204, Stop: 10473, Start Num: 12
Candidate Starts for DocB7_009:
(12, 10204), (13, 10219), (25, 10375), (32, 10426), (34, 10432),

Gene: Eggsie_13 Start: 12443, Stop: 12748, Start Num: 10
Candidate Starts for Eggsie_13:
(3, 12326), (4, 12347), (Start: 10 @12443 has 48 MA's), (15, 12497), (18, 12542), (29, 12641), (39,
12719),

Gene: Ekhein_13 Start: 12426, Stop: 12731, Start Num: 10
Candidate Starts for Ekhein_13:
(Start: 10 @12426 has 48 MA's), (15, 12480), (19, 12561), (29, 12624), (39, 12702),

Gene: Flakey_13 Start: 13299, Stop: 13604, Start Num: 10
Candidate Starts for Flakey_13:
(Start: 10 @13299 has 48 MA's), (15, 13353), (19, 13434), (29, 13497), (39, 13575),

Gene: GTE7_6 Start: 6748, Stop: 7053, Start Num: 10
Candidate Starts for GTE7_6:
(Start: 10 @6748 has 48 MA's), (29, 6946), (33, 6979), (36, 6994), (39, 7024),

Gene: GalacticEye_10 Start: 13222, Stop: 13527, Start Num: 10
Candidate Starts for GalacticEye_10:
(Start: 5 @13189 has 1 MA's), (6, 13195), (Start: 10 @13222 has 48 MA's), (19, 13357), (24, 13393),
(29, 13420), (39, 13498),

Gene: GourdThymes_13 Start: 13298, Stop: 13603, Start Num: 10
Candidate Starts for GourdThymes_13:
(Start: 10 @13298 has 48 MA's), (15, 13352), (19, 13433), (29, 13496), (39, 13574),

Gene: Guillaume_10 Start: 13254, Stop: 13559, Start Num: 10
Candidate Starts for Guillaume_10:
(Start: 5 @13221 has 1 MA's), (6, 13227), (Start: 10 @13254 has 48 MA's), (19, 13389), (24, 13425),
(29, 13452), (39, 13530),

Gene: Hail2Pitt_10 Start: 13731, Stop: 14036, Start Num: 10
Candidate Starts for Hail2Pitt_10:
(Start: 5 @13698 has 1 MA's), (6, 13704), (Start: 10 @13731 has 48 MA's), (19, 13866), (24, 13902),
(29, 13929), (39, 14007),

Gene: Harambe_10 Start: 13515, Stop: 13820, Start Num: 10

Candidate Starts for Harambe_10:

(Start: 5 @13482 has 1 MA's), (6, 13488), (Start: 10 @13515 has 48 MA's), (19, 13650), (24, 13686), (29, 13713), (39, 13791),

Gene: Hollow_13 Start: 14187, Stop: 14495, Start Num: 8

Candidate Starts for Hollow_13:

(Start: 8 @14187 has 12 MA's), (22, 14343), (27, 14382), (28, 14385), (32, 14418), (38, 14454), (39, 14466),

Gene: Hotorobo_13 Start: 13309, Stop: 13614, Start Num: 10

Candidate Starts for Hotorobo_13:

(Start: 10 @13309 has 48 MA's), (15, 13363), (19, 13444), (29, 13507), (39, 13585),

Gene: Jams_10 Start: 12695, Stop: 13000, Start Num: 10

Candidate Starts for Jams_10:

(Start: 5 @12662 has 1 MA's), (6, 12668), (Start: 10 @12695 has 48 MA's), (19, 12830), (24, 12866), (29, 12893), (39, 12971),

Gene: Jellybones_13 Start: 12461, Stop: 12766, Start Num: 10

Candidate Starts for Jellybones_13:

(Start: 10 @12461 has 48 MA's), (15, 12515), (19, 12596), (29, 12659), (39, 12737),

Gene: John316_13 Start: 12426, Stop: 12731, Start Num: 10

Candidate Starts for John316_13:

(Start: 10 @12426 has 48 MA's), (15, 12480), (19, 12561), (29, 12624), (39, 12702),

Gene: Jormungandr_10 Start: 13236, Stop: 13541, Start Num: 10

Candidate Starts for Jormungandr_10:

(Start: 5 @13203 has 1 MA's), (6, 13209), (Start: 10 @13236 has 48 MA's), (19, 13371), (24, 13407), (29, 13434), (39, 13512),

Gene: Kaseim_10 Start: 12687, Stop: 12992, Start Num: 10

Candidate Starts for Kaseim_10:

(Start: 5 @12654 has 1 MA's), (6, 12660), (Start: 10 @12687 has 48 MA's), (19, 12822), (24, 12858), (29, 12885), (39, 12963),

Gene: Katyusha_13 Start: 15021, Stop: 15329, Start Num: 8

Candidate Starts for Katyusha_13:

(Start: 8 @15021 has 12 MA's), (16, 15093), (22, 15177), (27, 15216), (28, 15219), (32, 15252), (38, 15288), (39, 15300),

Gene: Kvothe_13 Start: 14958, Stop: 15266, Start Num: 8

Candidate Starts for Kvothe_13:

(Start: 8 @14958 has 12 MA's), (22, 15114), (27, 15153), (28, 15156), (32, 15189), (38, 15225), (39, 15237),

Gene: Lahirium_10 Start: 13752, Stop: 14057, Start Num: 10

Candidate Starts for Lahirium_10:

(Start: 5 @13719 has 1 MA's), (6, 13725), (Start: 10 @13752 has 48 MA's), (19, 13887), (24, 13923), (29, 13950), (39, 14028),

Gene: Lidong_10 Start: 13501, Stop: 13806, Start Num: 10
Candidate Starts for Lidong_10:
(Start: 5 @13468 has 1 MA's), (6, 13474), (Start: 10 @13501 has 48 MA's), (19, 13636), (24, 13672),
(29, 13699), (39, 13777),

Gene: Linetti_14 Start: 13449, Stop: 13754, Start Num: 10
Candidate Starts for Linetti_14:
(Start: 10 @13449 has 48 MA's), (15, 13503), (19, 13584), (29, 13647), (39, 13725),

Gene: Lizzo_13 Start: 13298, Stop: 13603, Start Num: 10
Candidate Starts for Lizzo_13:
(Start: 10 @13298 has 48 MA's), (15, 13352), (19, 13433), (29, 13496), (39, 13574),

Gene: Luker_10 Start: 13183, Stop: 13521, Start Num: 5
Candidate Starts for Luker_10:
(Start: 5 @13183 has 1 MA's), (6, 13189), (Start: 10 @13216 has 48 MA's), (19, 13351), (24, 13387),
(29, 13414), (39, 13492),

Gene: Mbo2_9 Start: 6654, Stop: 6929, Start Num: 11
Candidate Starts for Mbo2_9:
(7, 6639), (11, 6654), (18, 6753), (22, 6807), (23, 6810), (30, 6855), (37, 6909),

Gene: Minos_10 Start: 13222, Stop: 13527, Start Num: 10
Candidate Starts for Minos_10:
(Start: 5 @13189 has 1 MA's), (6, 13195), (Start: 10 @13222 has 48 MA's), (19, 13357), (24, 13393),
(29, 13420), (39, 13498),

Gene: MrWormie_10 Start: 12386, Stop: 12691, Start Num: 10
Candidate Starts for MrWormie_10:
(Start: 5 @12353 has 1 MA's), (6, 12359), (Start: 10 @12386 has 48 MA's), (19, 12521), (24, 12557),
(29, 12584), (39, 12662),

Gene: Neoevie_10 Start: 13492, Stop: 13797, Start Num: 10
Candidate Starts for Neoevie_10:
(Start: 5 @13459 has 1 MA's), (6, 13465), (Start: 10 @13492 has 48 MA's), (19, 13627), (24, 13663),
(29, 13690), (39, 13768),

Gene: Newt_10 Start: 13233, Stop: 13538, Start Num: 10
Candidate Starts for Newt_10:
(Start: 5 @13200 has 1 MA's), (6, 13206), (Start: 10 @13233 has 48 MA's), (19, 13368), (24, 13404),
(29, 13431), (39, 13509),

Gene: Niagara_13 Start: 14978, Stop: 15286, Start Num: 8
Candidate Starts for Niagara_13:
(Start: 8 @14978 has 12 MA's), (22, 15134), (27, 15173), (28, 15176), (32, 15209), (38, 15245), (39,
15257),

Gene: Nimi13_10 Start: 13234, Stop: 13539, Start Num: 10
Candidate Starts for Nimi13_10:
(Start: 5 @13201 has 1 MA's), (6, 13207), (Start: 10 @13234 has 48 MA's), (19, 13369), (24, 13405),
(29, 13432), (39, 13510),

Gene: Philon9_14 Start: 16867, Stop: 17169, Start Num: 8

Candidate Starts for Philon9_14:

(Start: 8 @16867 has 12 MA's), (13, 16888), (14, 16915), (19, 16999), (22, 17017), (28, 17059), (32, 17092), (39, 17140),

Gene: PierreThree_13 Start: 13300, Stop: 13605, Start Num: 10

Candidate Starts for PierreThree_13:

(Start: 10 @13300 has 48 MA's), (15, 13354), (18, 13399), (19, 13435), (29, 13498), (39, 13576),

Gene: PokyPuppy_12 Start: 13191, Stop: 13496, Start Num: 10

Candidate Starts for PokyPuppy_12:

(Start: 10 @13191 has 48 MA's), (14, 13242), (29, 13389), (39, 13467),

Gene: RoyalG_14 Start: 12925, Stop: 13230, Start Num: 10

Candidate Starts for RoyalG_14:

(Start: 5 @12892 has 1 MA's), (6, 12898), (Start: 10 @12925 has 48 MA's), (39, 13201),

Gene: Sam12_13 Start: 12438, Stop: 12743, Start Num: 10

Candidate Starts for Sam12_13:

(Start: 10 @12438 has 48 MA's), (15, 12492), (19, 12573), (29, 12636), (39, 12714),

Gene: Shelley_10 Start: 12710, Stop: 13015, Start Num: 10

Candidate Starts for Shelley_10:

(Start: 5 @12677 has 1 MA's), (6, 12683), (Start: 10 @12710 has 48 MA's), (19, 12845), (24, 12881), (29, 12908), (39, 12986),

Gene: Squibbles_13 Start: 13298, Stop: 13603, Start Num: 10

Candidate Starts for Squibbles_13:

(Start: 10 @13298 has 48 MA's), (15, 13352), (19, 13433), (29, 13496), (39, 13574),

Gene: SteveFrench_12 Start: 12519, Stop: 12824, Start Num: 10

Candidate Starts for SteveFrench_12:

(Start: 5 @12486 has 1 MA's), (6, 12492), (Start: 10 @12519 has 48 MA's), (39, 12795),

Gene: Sticker17_10 Start: 13233, Stop: 13538, Start Num: 10

Candidate Starts for Sticker17_10:

(Start: 5 @13200 has 1 MA's), (6, 13206), (Start: 10 @13233 has 48 MA's), (19, 13368), (24, 13404), (29, 13431), (39, 13509),

Gene: Teal_10 Start: 13210, Stop: 13515, Start Num: 10

Candidate Starts for Teal_10:

(Start: 5 @13177 has 1 MA's), (6, 13183), (Start: 10 @13210 has 48 MA's), (19, 13345), (24, 13381), (29, 13408), (39, 13486),

Gene: Teatealatte_13 Start: 14941, Stop: 15249, Start Num: 8

Candidate Starts for Teatealatte_13:

(Start: 8 @14941 has 12 MA's), (22, 15097), (27, 15136), (28, 15139), (32, 15172), (38, 15208), (39, 15220),

Gene: Teech_13 Start: 14742, Stop: 15050, Start Num: 8

Candidate Starts for Teech_13:

(Start: 8 @14742 has 12 MA's), (22, 14898), (27, 14937), (28, 14940), (32, 14973), (38, 15009), (39, 15021),

Gene: Tredge_13 Start: 14941, Stop: 15249, Start Num: 8

Candidate Starts for Tredge_13:

(Start: 8 @14941 has 12 MA's), (22, 15097), (27, 15136), (28, 15139), (32, 15172), (38, 15208), (39, 15220),

Gene: Trogglehumper_31 Start: 19780, Stop: 20073, Start Num: 9

Candidate Starts for Trogglehumper_31:

(1, 19651), (Start: 9 @19780 has 1 MA's), (16, 19849), (17, 19873), (20, 19918), (21, 19924), (26, 19966), (31, 19996), (35, 20017),

Gene: Vitaenoi_14 Start: 16866, Stop: 17168, Start Num: 8

Candidate Starts for Vitaenoi_14:

(Start: 8 @16866 has 12 MA's), (13, 16887), (14, 16914), (19, 16998), (22, 17016), (28, 17058), (32, 17091), (39, 17139),

Gene: Woes_10 Start: 13762, Stop: 14067, Start Num: 10

Candidate Starts for Woes_10:

(Start: 5 @13729 has 1 MA's), (6, 13735), (Start: 10 @13762 has 48 MA's), (19, 13897), (24, 13933), (29, 13960), (39, 14038),