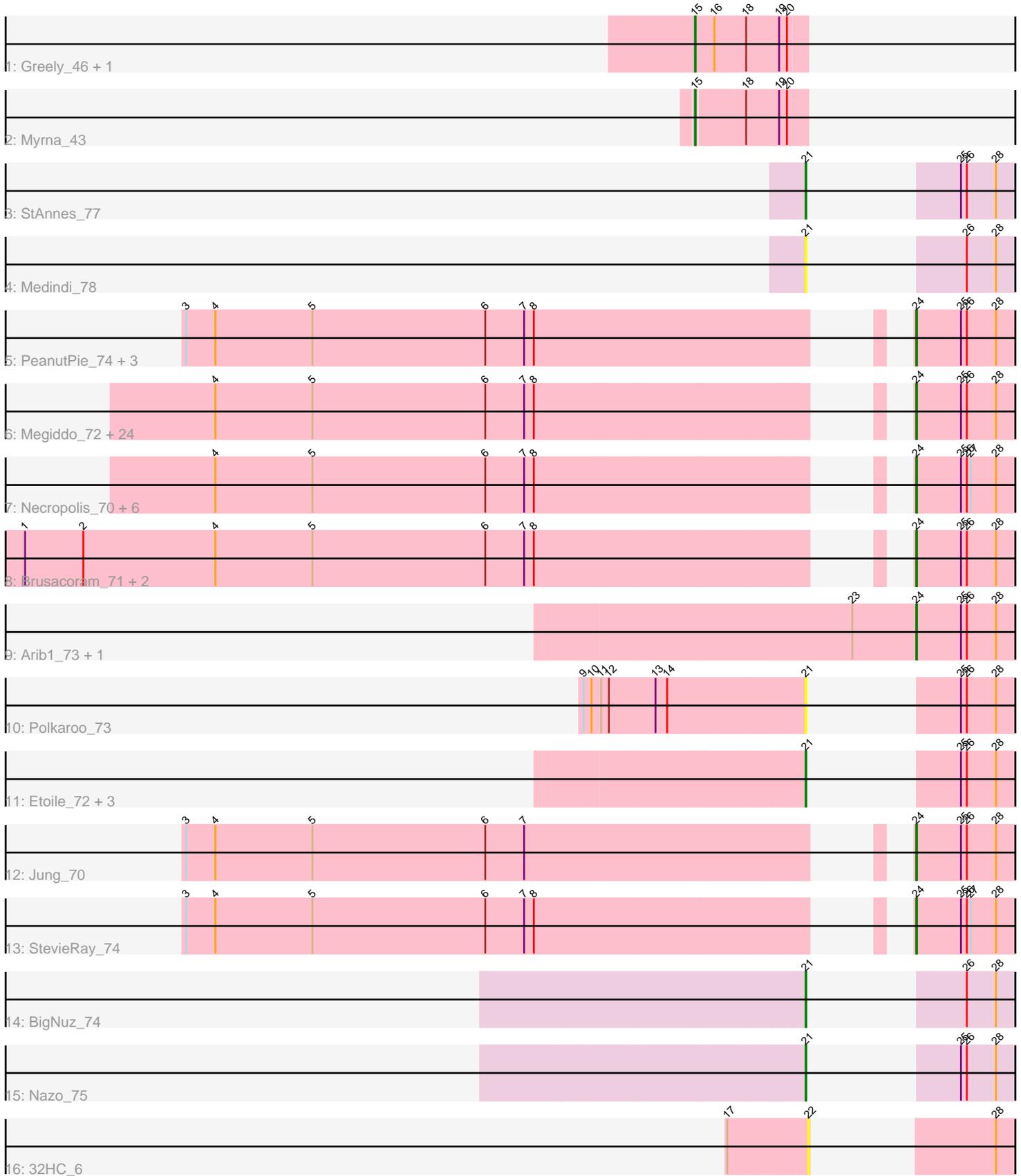


Pham 286995



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 286995 Report

This analysis was run 03/28/26 on database version 641.

Pham number 286995 has 56 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Greely_46, Phabba_48
- Track 2 : Myrna_43
- Track 3 : StAnnes_77
- Track 4 : Medindi_78
- Track 5 : PeanutPie_74, Bhagsy_75, Ksquared_73, FirstPlacePfu_73
- Track 6 : Megiddo_72, KilKor_73, Langerak_71, Fishburne_71, Jebeks_70, Donovan_72, Mangethe_75, DillTech15_82, Phalm_73, Gavriela_72, Camster_73, Malithi_72, Sonah_73, Techage_73, Zilizebeth_77, Majeke_75, Totinger_77, Phegasus_75, Fastidio_75, Chubbello_71, StressBall_72, Glaske_72, CactusJack_73, LittleShirley_81, Willsammy_74
- Track 7 : Necropolis_70, Dynamo_72, Bogie_75, GreaseLightnin_74, HUHilltop_75, Pygmy_76, Shipwreck_75
- Track 8 : Brusacoram_71, Atcoo_71, Thespis_71
- Track 9 : Arib1_73, Vidya_70
- Track 10 : Polkaroo_73
- Track 11 : Etoile_72, Kari_74, Bartholomew_70, Venti_72
- Track 12 : Jung_70
- Track 13 : StevieRay_74
- Track 14 : BigNuz_74
- Track 15 : Nazo_75
- Track 16 : 32HC_6

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 40 of the 49 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arib1_73, Atcoo_71, Bhagsy_75, Bogie_75, Brusacoram_71, CactusJack_73, Camster_73, Chubbello_71, DillTech15_82, Donovan_72, Dynamo_72, Fastidio_75, FirstPlacePfu_73, Fishburne_71, Gavriela_72, Glaske_72, GreaseLightnin_74, HUHilltop_75, Jebeks_70, Jung_70, KilKor_73, Ksquared_73, Langerak_71, LittleShirley_81, Majeke_75, Malithi_72, Mangethe_75, Megiddo_72, Necropolis_70, PeanutPie_74, Phalm_73, Phegasus_75, Pygmy_76, Shipwreck_75, Sonah_73,

StevieRay_74, StressBall_72, Techage_73, Thespis_71, Totinger_77, Vidya_70, Willsammy_74, Zilizebeth_77,

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

-

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

• 32HC_6, Bartholomew_70, BigNuz_74, Etoile_72, Greely_46, Kari_74, Medindi_78, Myrna_43, Nazo_75, Phabba_48, Polkaroo_73, StAnnes_77, Venti_72,

Summary by start number:

Start 15:

- Found in 3 of 56 (5.4%) of genes in pham
- Manual Annotations of this start: 2 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Greely_46 (C2), Myrna_43 (C2), Phabba_48 (C2),

Start 21:

- Found in 9 of 56 (16.1%) of genes in pham
- Manual Annotations of this start: 7 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bartholomew_70 (P1), BigNuz_74 (P4), Etoile_72 (P1), Kari_74 (P1), Medindi_78 (F1), Nazo_75 (P4), Polkaroo_73 (P1), StAnnes_77 (F1), Venti_72 (P1),

Start 22:

- Found in 1 of 56 (1.8%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 32HC_6 (Z),

Start 24:

- Found in 43 of 56 (76.8%) of genes in pham
- Manual Annotations of this start: 40 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arib1_73 (P1), Atcoo_71 (P1), Bhagsy_75 (P1), Bogie_75 (P1), Brusacoram_71 (P1), CactusJack_73 (P1), Camster_73 (P1), Chubbello_71 (P1), DillTech15_82 (F1), Donovan_72 (P1), Dynamo_72 (P1), Fastidio_75 (F1), FirstPlacePfu_73 (P1), Fishburne_71 (P1), Gavriela_72 (P1), Glaske_72 (P1), GreaseLightnin_74 (P1), HUHilltop_75 (P1), Jebeks_70 (P1), Jung_70 (P1), KilKor_73 (P1), Ksquared_73 (P1), Langerak_71 (P1), LittleShirley_81 (F1), Majeke_75 (P1), Malithi_72 (P1), Mangethe_75 (P1), Megiddo_72 (P1), Necropolis_70 (P1), PeanutPie_74 (P1), Phalm_73 (P1), Phegasus_75 (P1), Pygmy_76 (P1), Shipwreck_75 (P1), Sonah_73 (P1), StevieRay_74 (P1), StressBall_72 (P1), Techage_73 (P1), Thespis_71 (P1), Totinger_77 (F1), Vidya_70 (P1), Willsammy_74 (P1), Zilizebeth_77 (P1),

Summary by clusters:

There are 5 clusters represented in this pham: F1, Z, P1, P4, C2,

Info for manual annotations of cluster C2:

- Start number 15 was manually annotated 2 times for cluster C2.

Info for manual annotations of cluster F1:

- Start number 21 was manually annotated 1 time for cluster F1.
- Start number 24 was manually annotated 4 times for cluster F1.

Info for manual annotations of cluster P1:

- Start number 21 was manually annotated 4 times for cluster P1.
- Start number 24 was manually annotated 36 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 21 was manually annotated 2 times for cluster P4.

Gene Information:

Gene: 32HC_6 Start: 3167, Stop: 2994, Start Num: 22

Candidate Starts for 32HC_6:

(17, 3284), (22, 3167), (28, 3041),

Gene: Arib1_73 Start: 44656, Stop: 44829, Start Num: 24

Candidate Starts for Arib1_73:

(23, 44557), (Start: 24 @44656 has 40 MA's), (25, 44725), (26, 44734), (28, 44779),

Gene: Atcoo_71 Start: 46684, Stop: 46857, Start Num: 24

Candidate Starts for Atcoo_71:

(1, 45460), (2, 45550), (4, 45754), (5, 45904), (6, 46171), (7, 46231), (8, 46246), (Start: 24 @46684 has 40 MA's), (25, 46753), (26, 46762), (28, 46807),

Gene: Bartholomew_70 Start: 43762, Stop: 43935, Start Num: 21

Candidate Starts for Bartholomew_70:

(Start: 21 @43762 has 7 MA's), (25, 43831), (26, 43840), (28, 43885),

Gene: Bhagsy_75 Start: 45801, Stop: 45974, Start Num: 24

Candidate Starts for Bhagsy_75:

(3, 44826), (4, 44871), (5, 45021), (6, 45288), (7, 45348), (8, 45363), (Start: 24 @45801 has 40 MA's), (25, 45870), (26, 45879), (28, 45924),

Gene: BigNuz_74 Start: 46161, Stop: 46334, Start Num: 21

Candidate Starts for BigNuz_74:

(Start: 21 @46161 has 7 MA's), (26, 46239), (28, 46284),

Gene: Bogie_75 Start: 46296, Stop: 46475, Start Num: 24

Candidate Starts for Bogie_75:

(4, 45366), (5, 45516), (6, 45783), (7, 45843), (8, 45858), (Start: 24 @46296 has 40 MA's), (25, 46365), (26, 46374), (27, 46380), (28, 46419),

Gene: Brusacoram_71 Start: 45227, Stop: 45400, Start Num: 24

Candidate Starts for Brusacoram_71:

(1, 44003), (2, 44093), (4, 44297), (5, 44447), (6, 44714), (7, 44774), (8, 44789), (Start: 24 @45227 has 40 MA's), (25, 45296), (26, 45305), (28, 45350),

Gene: CactusJack_73 Start: 45924, Stop: 46097, Start Num: 24

Candidate Starts for CactusJack_73:

(4, 44994), (5, 45144), (6, 45411), (7, 45471), (8, 45486), (Start: 24 @45924 has 40 MA's), (25, 45993), (26, 46002), (28, 46047),

Gene: Camster_73 Start: 44757, Stop: 44930, Start Num: 24

Candidate Starts for Camster_73:

(4, 43827), (5, 43977), (6, 44244), (7, 44304), (8, 44319), (Start: 24 @44757 has 40 MA's), (25, 44826), (26, 44835), (28, 44880),

Gene: Chubbello_71 Start: 43946, Stop: 44119, Start Num: 24

Candidate Starts for Chubbello_71:

(4, 43016), (5, 43166), (6, 43433), (7, 43493), (8, 43508), (Start: 24 @43946 has 40 MA's), (25, 44015), (26, 44024), (28, 44069),

Gene: DillTech15_82 Start: 47918, Stop: 48091, Start Num: 24

Candidate Starts for DillTech15_82:

(4, 46988), (5, 47138), (6, 47405), (7, 47465), (8, 47480), (Start: 24 @47918 has 40 MA's), (25, 47987), (26, 47996), (28, 48041),

Gene: Donovan_72 Start: 44886, Stop: 45059, Start Num: 24

Candidate Starts for Donovan_72:

(4, 43956), (5, 44106), (6, 44373), (7, 44433), (8, 44448), (Start: 24 @44886 has 40 MA's), (25, 44955), (26, 44964), (28, 45009),

Gene: Dynamo_72 Start: 44330, Stop: 44509, Start Num: 24

Candidate Starts for Dynamo_72:

(4, 43400), (5, 43550), (6, 43817), (7, 43877), (8, 43892), (Start: 24 @44330 has 40 MA's), (25, 44399), (26, 44408), (27, 44414), (28, 44453),

Gene: Etoile_72 Start: 45250, Stop: 45423, Start Num: 21

Candidate Starts for Etoile_72:

(Start: 21 @45250 has 7 MA's), (25, 45319), (26, 45328), (28, 45373),

Gene: Fastidio_75 Start: 44726, Stop: 44899, Start Num: 24

Candidate Starts for Fastidio_75:

(4, 43796), (5, 43946), (6, 44213), (7, 44273), (8, 44288), (Start: 24 @44726 has 40 MA's), (25, 44795), (26, 44804), (28, 44849),

Gene: FirstPlacePfu_73 Start: 43289, Stop: 43462, Start Num: 24

Candidate Starts for FirstPlacePfu_73:

(3, 42314), (4, 42359), (5, 42509), (6, 42776), (7, 42836), (8, 42851), (Start: 24 @43289 has 40 MA's), (25, 43358), (26, 43367), (28, 43412),

Gene: Fishburne_71 Start: 44712, Stop: 44885, Start Num: 24

Candidate Starts for Fishburne_71:

(4, 43782), (5, 43932), (6, 44199), (7, 44259), (8, 44274), (Start: 24 @44712 has 40 MA's), (25, 44781), (26, 44790), (28, 44835),

Gene: Gavriela_72 Start: 45617, Stop: 45790, Start Num: 24

Candidate Starts for Gavriela_72:

(4, 44687), (5, 44837), (6, 45104), (7, 45164), (8, 45179), (Start: 24 @45617 has 40 MA's), (25, 45686), (26, 45695), (28, 45740),

Gene: Glaske_72 Start: 45924, Stop: 46097, Start Num: 24

Candidate Starts for Glaske_72:

(4, 44994), (5, 45144), (6, 45411), (7, 45471), (8, 45486), (Start: 24 @45924 has 40 MA's), (25, 45993), (26, 46002), (28, 46047),

Gene: GreaseLightnin_74 Start: 46081, Stop: 46260, Start Num: 24

Candidate Starts for GreaseLightnin_74:

(4, 45151), (5, 45301), (6, 45568), (7, 45628), (8, 45643), (Start: 24 @46081 has 40 MA's), (25, 46150), (26, 46159), (27, 46165), (28, 46204),

Gene: Greely_46 Start: 17705, Stop: 17872, Start Num: 15

Candidate Starts for Greely_46:

(Start: 15 @17705 has 2 MA's), (16, 17732), (18, 17780), (19, 17831), (20, 17843),

Gene: HUHilltop_75 Start: 44553, Stop: 44732, Start Num: 24

Candidate Starts for HUHilltop_75:

(4, 43623), (5, 43773), (6, 44040), (7, 44100), (8, 44115), (Start: 24 @44553 has 40 MA's), (25, 44622), (26, 44631), (27, 44637), (28, 44676),

Gene: Jebeks_70 Start: 43184, Stop: 43357, Start Num: 24

Candidate Starts for Jebeks_70:

(4, 42254), (5, 42404), (6, 42671), (7, 42731), (8, 42746), (Start: 24 @43184 has 40 MA's), (25, 43253), (26, 43262), (28, 43307),

Gene: Jung_70 Start: 44205, Stop: 44378, Start Num: 24

Candidate Starts for Jung_70:

(3, 43230), (4, 43275), (5, 43425), (6, 43692), (7, 43752), (Start: 24 @44205 has 40 MA's), (25, 44274), (26, 44283), (28, 44328),

Gene: Kari_74 Start: 45246, Stop: 45419, Start Num: 21

Candidate Starts for Kari_74:

(Start: 21 @45246 has 7 MA's), (25, 45315), (26, 45324), (28, 45369),

Gene: KilKor_73 Start: 46617, Stop: 46790, Start Num: 24

Candidate Starts for KilKor_73:

(4, 45687), (5, 45837), (6, 46104), (7, 46164), (8, 46179), (Start: 24 @46617 has 40 MA's), (25, 46686), (26, 46695), (28, 46740),

Gene: Ksquared_73 Start: 46305, Stop: 46478, Start Num: 24

Candidate Starts for Ksquared_73:

(3, 45330), (4, 45375), (5, 45525), (6, 45792), (7, 45852), (8, 45867), (Start: 24 @46305 has 40 MA's), (25, 46374), (26, 46383), (28, 46428),

Gene: Langerak_71 Start: 44690, Stop: 44863, Start Num: 24

Candidate Starts for Langerak_71:

(4, 43760), (5, 43910), (6, 44177), (7, 44237), (8, 44252), (Start: 24 @44690 has 40 MA's), (25, 44759), (26, 44768), (28, 44813),

Gene: LittleShirley_81 Start: 48399, Stop: 48572, Start Num: 24

Candidate Starts for LittleShirley_81:

(4, 47469), (5, 47619), (6, 47886), (7, 47946), (8, 47961), (Start: 24 @48399 has 40 MA's), (25, 48468), (26, 48477), (28, 48522),

Gene: Majeke_75 Start: 45335, Stop: 45508, Start Num: 24

Candidate Starts for Majeke_75:

(4, 44405), (5, 44555), (6, 44822), (7, 44882), (8, 44897), (Start: 24 @45335 has 40 MA's), (25, 45404), (26, 45413), (28, 45458),

Gene: Malithi_72 Start: 44479, Stop: 44652, Start Num: 24

Candidate Starts for Malithi_72:

(4, 43549), (5, 43699), (6, 43966), (7, 44026), (8, 44041), (Start: 24 @44479 has 40 MA's), (25, 44548), (26, 44557), (28, 44602),

Gene: Mangethe_75 Start: 45335, Stop: 45508, Start Num: 24

Candidate Starts for Mangethe_75:

(4, 44405), (5, 44555), (6, 44822), (7, 44882), (8, 44897), (Start: 24 @45335 has 40 MA's), (25, 45404), (26, 45413), (28, 45458),

Gene: Medindi_78 Start: 48173, Stop: 48346, Start Num: 21

Candidate Starts for Medindi_78:

(Start: 21 @48173 has 7 MA's), (26, 48251), (28, 48296),

Gene: Megiddo_72 Start: 46485, Stop: 46658, Start Num: 24

Candidate Starts for Megiddo_72:

(4, 45555), (5, 45705), (6, 45972), (7, 46032), (8, 46047), (Start: 24 @46485 has 40 MA's), (25, 46554), (26, 46563), (28, 46608),

Gene: Myrna_43 Start: 18142, Stop: 18309, Start Num: 15

Candidate Starts for Myrna_43:

(Start: 15 @18142 has 2 MA's), (18, 18214), (19, 18265), (20, 18277),

Gene: Nazo_75 Start: 46047, Stop: 46220, Start Num: 21

Candidate Starts for Nazo_75:

(Start: 21 @46047 has 7 MA's), (25, 46116), (26, 46125), (28, 46170),

Gene: Necropolis_70 Start: 43920, Stop: 44099, Start Num: 24

Candidate Starts for Necropolis_70:

(4, 42990), (5, 43140), (6, 43407), (7, 43467), (8, 43482), (Start: 24 @43920 has 40 MA's), (25, 43989), (26, 43998), (27, 44004), (28, 44043),

Gene: PeanutPie_74 Start: 45804, Stop: 45977, Start Num: 24

Candidate Starts for PeanutPie_74:

(3, 44829), (4, 44874), (5, 45024), (6, 45291), (7, 45351), (8, 45366), (Start: 24 @45804 has 40 MA's), (25, 45873), (26, 45882), (28, 45927),

Gene: Phabba_48 Start: 17733, Stop: 17900, Start Num: 15

Candidate Starts for Phabba_48:

(Start: 15 @17733 has 2 MA's), (16, 17760), (18, 17808), (19, 17859), (20, 17871),

Gene: Phalm_73 Start: 45915, Stop: 46088, Start Num: 24

Candidate Starts for Phalm_73:

(4, 44985), (5, 45135), (6, 45402), (7, 45462), (8, 45477), (Start: 24 @45915 has 40 MA's), (25, 45984), (26, 45993), (28, 46038),

Gene: Phegasus_75 Start: 45302, Stop: 45475, Start Num: 24

Candidate Starts for Phegasus_75:

(4, 44372), (5, 44522), (6, 44789), (7, 44849), (8, 44864), (Start: 24 @45302 has 40 MA's), (25, 45371), (26, 45380), (28, 45425),

Gene: Polkaroo_73 Start: 46361, Stop: 46534, Start Num: 21

Candidate Starts for Polkaroo_73:

(9, 46028), (10, 46040), (11, 46052), (12, 46064), (13, 46136), (14, 46154), (Start: 21 @46361 has 7 MA's), (25, 46430), (26, 46439), (28, 46484),

Gene: Pygmy_76 Start: 46269, Stop: 46448, Start Num: 24

Candidate Starts for Pygmy_76:

(4, 45339), (5, 45489), (6, 45756), (7, 45816), (8, 45831), (Start: 24 @46269 has 40 MA's), (25, 46338), (26, 46347), (27, 46353), (28, 46392),

Gene: Shipwreck_75 Start: 46327, Stop: 46506, Start Num: 24

Candidate Starts for Shipwreck_75:

(4, 45397), (5, 45547), (6, 45814), (7, 45874), (8, 45889), (Start: 24 @46327 has 40 MA's), (25, 46396), (26, 46405), (27, 46411), (28, 46450),

Gene: Sonah_73 Start: 44024, Stop: 44197, Start Num: 24

Candidate Starts for Sonah_73:

(4, 43094), (5, 43244), (6, 43511), (7, 43571), (8, 43586), (Start: 24 @44024 has 40 MA's), (25, 44093), (26, 44102), (28, 44147),

Gene: StAnnes_77 Start: 48907, Stop: 49080, Start Num: 21

Candidate Starts for StAnnes_77:

(Start: 21 @48907 has 7 MA's), (25, 48976), (26, 48985), (28, 49030),

Gene: StevieRay_74 Start: 46461, Stop: 46634, Start Num: 24

Candidate Starts for StevieRay_74:

(3, 45486), (4, 45531), (5, 45681), (6, 45948), (7, 46008), (8, 46023), (Start: 24 @46461 has 40 MA's), (25, 46530), (26, 46539), (27, 46545), (28, 46584),

Gene: StressBall_72 Start: 45617, Stop: 45790, Start Num: 24

Candidate Starts for StressBall_72:

(4, 44687), (5, 44837), (6, 45104), (7, 45164), (8, 45179), (Start: 24 @45617 has 40 MA's), (25, 45686), (26, 45695), (28, 45740),

Gene: Techage_73 Start: 44818, Stop: 44991, Start Num: 24

Candidate Starts for Techage_73:

(4, 43888), (5, 44038), (6, 44305), (7, 44365), (8, 44380), (Start: 24 @44818 has 40 MA's), (25, 44887), (26, 44896), (28, 44941),

Gene: Thespis_71 Start: 45227, Stop: 45400, Start Num: 24

Candidate Starts for Thespis_71:

(1, 44003), (2, 44093), (4, 44297), (5, 44447), (6, 44714), (7, 44774), (8, 44789), (Start: 24 @45227 has 40 MA's), (25, 45296), (26, 45305), (28, 45350),

Gene: Totinger_77 Start: 47476, Stop: 47649, Start Num: 24

Candidate Starts for Totinger_77:

(4, 46546), (5, 46696), (6, 46963), (7, 47023), (8, 47038), (Start: 24 @47476 has 40 MA's), (25, 47545), (26, 47554), (28, 47599),

Gene: Venti_72 Start: 43762, Stop: 43935, Start Num: 21

Candidate Starts for Venti_72:

(Start: 21 @43762 has 7 MA's), (25, 43831), (26, 43840), (28, 43885),

Gene: Vidya_70 Start: 44225, Stop: 44398, Start Num: 24

Candidate Starts for Vidya_70:

(23, 44126), (Start: 24 @44225 has 40 MA's), (25, 44294), (26, 44303), (28, 44348),

Gene: Willsammy_74 Start: 46101, Stop: 46274, Start Num: 24

Candidate Starts for Willsammy_74:

(4, 45171), (5, 45321), (6, 45588), (7, 45648), (8, 45663), (Start: 24 @46101 has 40 MA's), (25, 46170), (26, 46179), (28, 46224),

Gene: Zilizebeth_77 Start: 45659, Stop: 45832, Start Num: 24

Candidate Starts for Zilizebeth_77:

(4, 44729), (5, 44879), (6, 45146), (7, 45206), (8, 45221), (Start: 24 @45659 has 40 MA's), (25, 45728), (26, 45737), (28, 45782),