

Novel deletion alleles of a *C. elegans* gene Y73E7A.1, named as *tm6429* and *tm6475*

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Description:

We report *tm6429* and *tm6475* as novel deletion alleles of the gene *Y73E7A.1* that is a homologue of mammalian Coiled-coil domain containing 124 (Ccdc124)¹. The Ccdc124 is a conserved gene from invertebrates to human. In human cell lines, Ccdc124 is a component of the centrosome during interphase and at the G2/M transition. During cell division, Ccdc124 relocates to the midbody at telophase and acts as an essential molecular component in cytokinesis². The alleles were isolated from the comprehensive screening of gene deletions generated by TMP/UV³. In the screening, both the alleles were detected by nested PCR using the following primer sets, 5'-GTGTGAATCGAGGAGGCGCA-3' and 5'-TTTCCAGTCCGGCAGGCGAT-3' for first round PCR and 5'-AACGGCAAACGCGCTCTATG-3' and 5'-CGTGTGCACGTGGAAGTCCA-3' for second round PCR. By Sanger sequencing, the 30bp flanking sequences of the alleles *tm6429* and *tm6475* were identified as TTTTAAATCGATTTTGGAGCACCAAAATTA- [355 bp deletion + 1 bp insertion (T)] - TTAAAAATGAGAAAAAATGGGGAAAAAATT and CAAACGCGCTCTATGGAGAATGTGGAATTA- [242 bp deletion] - TTTTATATAGGATTTTAATTTTCAGGCCAC, respectively. Based on the information about the splicing isoforms of *Y73E7A.1* (WormBase, <http://www.wormbase.org>, WS259), the start codon of *Y73E7A.1a* and *Y73E7A.1b* transcripts are deleted in *tm6429* and *tm6475*, respectively (Fig. 1), suggesting that those alleles may be usable for the analysis of isoform specific function.

Reagents

FX06429 *Y73E7A.1* (*tm6429*) I (Not outcrossed)

FX06475 *Y73E7A.1* (*tm6475*) I (Not outcrossed)

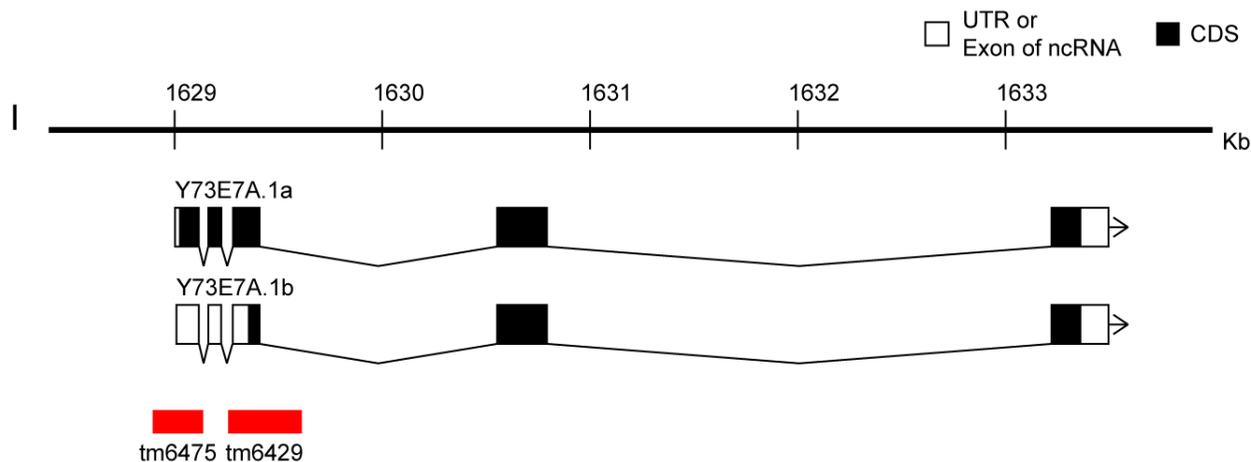


Fig. 1 Location of the novel alleles

References

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