

# **Nucleotide sequence of a yeast tRNAArg3a gene and its transcription in a homologous in vitro system**

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## **Abstract**

Twelve bacterial clones containing complementary sequences to yeast tRNA<sup>Arg</sup> were isolated from a gene library. The size of the yeast BamHI inserts ranges from 5.4 to 10 MDa. There are at least 6 copies of this gene in different loci of the yeast genome. Insert from clone pYAT-3 was mapped, and the presence of a tRNA<sup>Arg</sup> gene was confirmed by DNA sequence. The coding region is colinear with the transcriptional product. Unlike other reported tRNA<sup>Arg</sup> genes, this one is not linked to a tRNA<sup>Asp</sup> gene. In vitro transcription using a yeast extract produces a transcript of 76 + 1 bases.

**Keywords:** Yeast tRNA<sup>Arg</sup> gene, DNA sequence, Scattered gene arrangement, Homologous in vitro transcription.