

The primary structure of cytoplasmic initiator tRNA^{Met} from *Schizosaccharomyces pombe*

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Received April 15, 1993; Accepted May 7, 1993

EMBL accession no. X69095

The cytoplasmic initiator tRNA^{Met} from bulk *Schizosaccharomyces pombe* tRNA was purified by column chromatography and gel electrophoresis. Its primary structure was determined using [³²] postlabelling methods (1); it is depicted in its cloverleaf fold in Figure 1. It contains 75 nucleotides including nine modified ones: pψ, pm²G, pD, pm²G, pt⁶A, pm⁷G, pm⁵C, pm¹A and pGr(p). It is identical, if the modified nucleotides are not taken into account, to the already published gene sequence (2). Amongst the modified nucleotides, we point out the presence of a pseudouridine at the 5'-end. This modification has, to date, only been found before in that position in two other yeast tRNAs: *Saccharomyces cerevisiae* tRNA^{Lys}/NUU (3) and tRNA^{Arg}/ACG (4). This tRNA carries also in position 64 a hypermodified guanosine: Gr(p) (5). The presence of phosphoribosylated purines in position 64 of yeast and plant initiator tRNAs^{Met} (5) seems to be a general feature: it might be a determinant which could play a discriminatory role in the initiation process of translation in these organisms (6).

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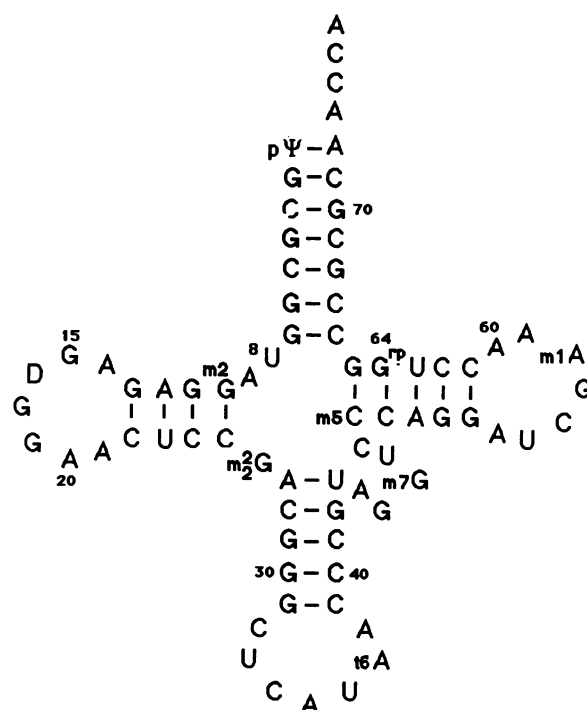


Figure 1.