

Certificate of analysis

Product Name/Description: mRNA Cap 2'-O-Methyltransferase
Cat. #: 2470A
Lot #: Specified on product label
Storage Conditions: -20 degrees C
Expiration Date: Specified on product label or package

Package Size: 2500 U

Package Contents:	1. mRNA Cap 2'-O-Methyltransferase	50 U/μl	2500 U
	2. 10X Capping Buffer		100 μl
	3. S-adenosylmethionine (SAM)	32 mM	100 μl

Source: Escherichia coli carrying a plasmid containing the gene for vaccinia virus mRNA cap 2'-O-methyltransferase

Unit Definition: One unit is defined as the amount of enzyme that methylates 10 pmol of Cap-0 RNA in 1 hour at 37°C.

Quality Control Data:

Nuclease contamination tests:

Nuclease activities were not obviously detected in any of the following tests by agarose-gel electrophoresis:

- 1) Incubating 1 μg of λ DNA-Hind III digest with 50 units of the enzyme for 4 hours at 37°C.
- 2) Incubating 1 μg of supercoiled pBR322 DNA with 50 units of the enzyme for 4 hours at 37°C.
- 3) Incubating 1 μg of 16S, 23S rRNA with 50 units of the enzyme for 4 hours at 37°C.

Protein purity:

The enzyme was detected as a main band of approximately 40 kDa protein in SDS-PAGE analysis.

Functional test of S-adenosylmethionine (SAM):

No obvious digestion or difference (comparing to previous lot) of the 1 μg of λ DNA that had been pretreated with 160 μM of SAM and 2 units of CpG Methylase was observed after incubation with 10 units of Acc II restriction enzyme in agarose-gel electrophoresis.

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department of Takara Bio Inc.

Notice To Purchaser:

Please refer to the website.

Product Documents, Patent Markings, Trademarks, & Safety Information:

Refer to website for availability to download or contact your local office:
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