



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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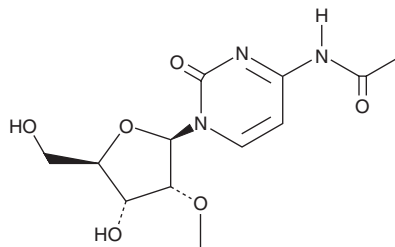
# PRODUCT INFORMATION



## N<sup>4</sup>-Acetyl-2'-O-methylcytidine

Item No. 40285

**CAS Registry No.:** 113886-71-8  
**Formal Name:** N-acetyl-2'-O-methyl-cytidine  
**Synonym:** ac<sup>4</sup>Cm  
**MF:** C<sub>12</sub>H<sub>17</sub>N<sub>3</sub>O<sub>6</sub>  
**FW:** 299.3  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

N<sup>4</sup>-Acetyl-2'-O-methylcytidine (ac<sup>4</sup>Cm) is supplied as a solid. A stock solution may be made by dissolving the ac<sup>4</sup>Cm in the solvent of choice, which should be purged with an inert gas. Ac<sup>4</sup>Cm is soluble in DMSO. Ac<sup>4</sup>Cm is slightly soluble in acetonitrile. It is also slightly soluble in water. We do not recommend storing the aqueous solution for more than one day.

### Description

ac<sup>4</sup>Cm is a pyrimidine nucleoside and a post-transcriptionally modified derivative of cytidine (Item No. 29602).<sup>1</sup> ac<sup>4</sup>Cm has been found in the tRNA and 5S rRNA of *Archaea* thermophiles and increases RNA rigidity and stability through stronger complimentary base pairing with the purine nucleoside guanosine (Item No. 27702) compared to cytidine.<sup>1,2</sup>

### References

1. Kawai, G., Hashizume, T., Yasuda, M., *et al.* Conformational rigidity of N<sup>4</sup>-acetyl-2'-O-methylcytidine found in tRNA of extremely thermophilic archaeobacteria (archaea). *Nucleosides and Nucleotides* **11(2-4)**, 759-77 (1992).
2. Kowalak, J.A., Dalluge, J.J., McCloskey, J.A., *et al.* The role of posttranscriptional modification in stabilization of transfer RNA from hyperthermophiles. *Biochemistry* **33(25)**, 7869-7876 (1994).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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