



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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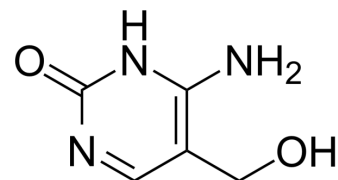
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## 5-Hydroxymethylcytosine

Cat. No.:	HY-W018324		
CAS No.:	1123-95-1		
Molecular Formula:	C <sub>5</sub> H <sub>7</sub> N <sub>3</sub> O <sub>2</sub>		
Molecular Weight:	141.13		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

#### Description

5-Hydroxymethylcytosine (5hmC) is an oxidized form of 5-methylcytosine (5mC) in mammalian DNA. 5-Hydroxymethylcytosine is produced from 5mC in an enzymatic pathway involving three 5mC oxidases, Ten-eleven translocation (TET)1, TET2, and TET3. The conversion of 5mC into 5hmC can be the first step in a pathway leading towards DNA demethylation. 5-Hydroxymethylcytosine is associated with gene transcription and frequently used as a mark to investigate dynamic DNA methylation conversion during mammalian development<sup>[1]</sup>.

### REFERENCES

- [1]. Gerd P Pfeifer, et al. 5-hydroxymethylcytosine and its potential roles in development and cancer. *Epigenetics Chromatin*. 2013 May 1;6(1):10.
- [2]. Xiao-Long Cui, et al. A human tissue map of 5-hydroxymethylcytosines exhibits tissue specificity through gene and enhancer modulation. *Nat Commun*. 2020 Dec 2;11(1):6161.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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