

Anti-5-Hydroxymethylcytosine Antibody

Mouse Monoclonal Antibody

Catalog # ABV12026

Product Information

Application	E
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Names	4D9

Additional Information

Application & Usage	Dot Blot, ELISA
Other Names	5-hmc, 5hmc
Target/Specificity	5-hmc
Antibody Form	Liquid
Appearance	Colorless liquid
Formulation	Phosphate Buffer 10mM - NaCl 0.15 M - pH 7.5
Handling	The antibody solution should be gently mixed before use.
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-5-Hydroxymethylcytosine Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Background

5-hydroxymethylcytosine (5-hmC) is a modified base form of cytosine recently found in human/mouse brain and in embryonic stem cells. This DNA pyrimidine nitrogen base can be generated by oxidation of 5-methylcytosine, a reaction mediated by the ten-eleven translocation (TET) family of the 5-mC hydroxylases. The function of this base is still not elucidated but it is believed to play an important role in switching genes on and off.

Images

Dot Biot analysis of the 5hmC monoclonal antibody (4D9)
with DNA standard containing Cytosine (C)t

C	5-mC	5-hmC	TBS
			

5-methylcytosine (5-mC) or 5-hydroxymethylcytosine (5-hmC).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.