



Rabbit Anti-Human 5-Hydroxymethylcytosine monoclonal antibody, clone SN347 (CABT-L1171)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	5-Hydroxymethylcytosine
Immunogen	BSA-conjugated 5-hydroxymethylcytosine
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Clone	SN347
Purification	Protein A Purified
Conjugate	Unconjugated
Applications	ELISA, ICC, IHC, IP, IF
Format	Liquid
Concentration	1 mg/ml
Buffer	PBS, pH 7.2-7.4, with 1% BSA, 50% glycerol
Preservative	0.09% Sodium Azide
Storage	Store at -20°C, Avoid Freeze/Thaw Cycles.

BACKGROUND

Introduction

5-hydroxymethylcytosine (5-hmC) has been recently discovered in mammalian DNA. 5-hmC results from the enzymatic conversion of 5-methylcytosine into 5-hydroxymethylcytosine by the TET family of oxygenases. Initially, the 5-hmC base had been identified in Purkinje neurons, in granule cells and embryonic stem cells where it is present at high levels (up to 0,6% of total nucleotides in Purkinje cells). A recent report indicates that 5-hmC is also abundant in brain tissue, especially in areas that are associated with higher cognitive functions. Early evidence suggests that 5-hmC may represent an intermediate in a new pathway which demethylates DNA, converting 5-mC to cytosine. Although its precise role has still to be shown, recent results indicate, however, that 5-hmC may play important roles distinct from 5-mC. This may open up entirely new perspectives in epigenetic studies.

Keywords

C5H7N3O