

Datasheet for ABIN7206382

anti-MICU1 antibody

5 Images

[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	MICU1
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This MICU1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (IF)

Product Details

Purpose:	MICU1 Monoclonal Antibody
Immunogen:	Recombinant Protein
Isotype:	IgG1
Specificity:	The antibody detects endogenous MICU1 protein.
Purification:	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen

Target Details

Target:	MICU1
Alternative Name:	MICU1 (MICU1 Products)

Target Details

Background: Mouse Anti-MICU1 Monoclonal Antibody, Most PKMT substrates are histone proteins and transcription factors, emphasizing the importance of lysine methylation in regulating chromatin structure and gene expression. Lys9 of histone H3 is mono- or di-methylated by G9A/GLP and tri-methylated by SETDB1 to activate transcription. JHDM3A-mediated demethylation of the same residue creates mono-methyl Lys9 and inhibits gene transcription. Tumor suppressor p53 is regulated by methylation of at least four sites. p53-mediated transcription is repressed following mono-methylation of p53 at Lys370 by SMYD2, di-methylation at the same residue further inhibits p53 by preventing association with 53BP1. Concomitant di-methylation at Lys382 inhibits p53 ubiquitination following DNA damage. Mono-methylation at Lys382 by SET8 suppresses p53 transcriptional activity, while SET7/9 mono-methylation at Lys372 inhibits SMYD2 methylation at Lys370 and stabilizes the p53 protein. Di-methylation at Lys373 by G9A/GLP inhibits p53-mediated apoptosis and correlates with tri-methylation of histone H3 Lys9 at the p21 promoter. Overexpression of PKMTs is associated with multiple forms of human cancer, which has generated tremendous interest in targeting protein lysine methyltransferases in drug discovery research. Calcium uptake protein 1, mitochondrial

Gene ID: 10367

UniProt: [Q9BPX6](#)

Application Details

Application Notes: Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: WB (1:1000-1:2000), IF (1:100-1:200), IHC-P (1:100-1:200).

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 mg/mL

Buffer: PBS, pH 7.4, containing 0.02 % Sodium Azide as preservative and 50 % Glycerol.

Preservative: Sodium azide

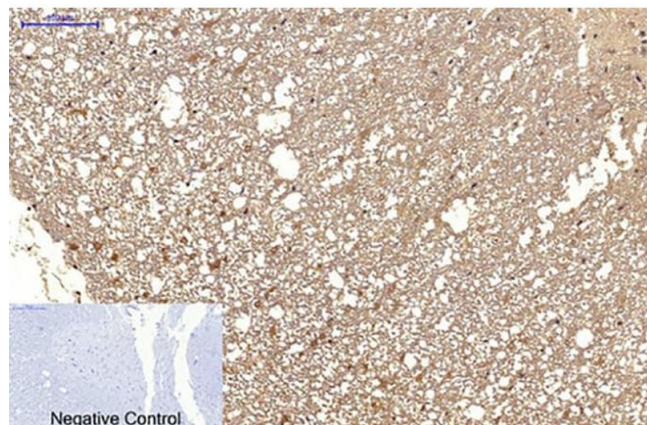
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Stable for one year at -20°C from date of shipment. For maximum recovery of product,

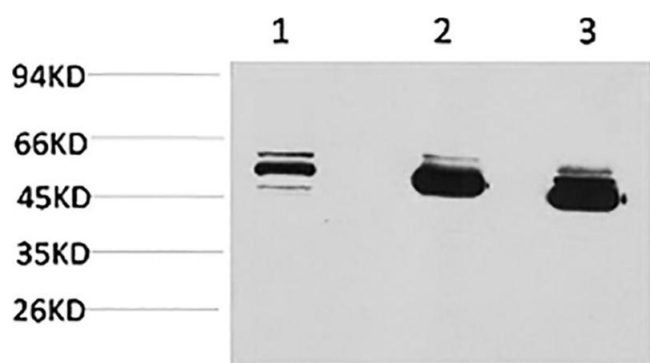
centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing.

Images



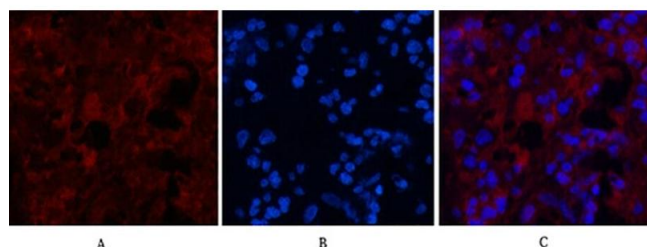
Immunohistochemistry

Image 1. Immunohistochemical analysis of paraffin-embedded rat spinal cord tissue. 1, MICU1 Monoclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20 min). 3, secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.



Western Blotting

Image 2. Western blot analysis of 1) MCF7, 2) mouse brain tissue, 3) rat brain tissue using MICU1 Monoclonal Antibody.



Immunofluorescence

Image 3. Immunofluorescence analysis of human appendix tissue. 1, MICU1 Monoclonal Antibody (red) was diluted at 1:200 (4 °C, overnight). 2, Cy3 Labeled secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN7206382.