Datasheet for ABIN6143681

anti-MECP2 antibody (AA 1-100)

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Overview

Quantity:	100 µL
Target:	MECP2
Binding Specificity:	AA 1-100
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MECP2 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	A synthetic peptide corresponding to a sequence within amino acids 1-100 of human MECP2 (NP_004983.1).
Sequence:	MVAGMLGLRE EKSEDQDLQG LKDKPLKFKK VKKDKKEEKE GKHEPVQPSA HHSAEPAEAG KAETSEGSGS APAVPEASAS PKQRRSIIRD RGPMYDDPTL
Isotype:	IgG
Cross-Reactivity:	Mouse, Rat
Characteristics:	Polyclonal Antibodies

Target Details

Target:	MECP2

Target Details

Alternative Name:	MECP2 (MECP2 Products)
Background:	DNA methylation is the major modification of eukaryotic genomes and plays an essential role in mammalian development. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family of nuclear proteins related by the presence in each of a methyl-CpG binding domain (MBD). Each of these proteins, with the exception of MBD3, is capable of binding specifically to methylated DNA. MECP2, MBD1 and MBD2 can also repress transcription from methylated gene promoters. In contrast to other MBD family members, MECP2 is X-linked and subject to X inactivation. MECP2 is dispensible in stem cells, but is essential for embryonic development. MECP2 gene mutations are the cause of most cases of Rett syndrome, a progressive neurologic developmental disorder and one of the most common causes of mental retardation in females. Alternative splicing results in multiple transcript variants encoding different isoforms.,MECP2,AUTSX3,MRX16,MRX79,MRXS13,MRXSL,PPMX,RS,RTS,RTT,Epigenetics & Nuclear Signaling,RNA Binding,Neuroscience,Neurodegenerative Diseases,MECP2
Molecular Weight:	52 kDa/53 kDa
Gene ID:	4204
UniProt:	P51608
Pathways:	Inositol Metabolic Process, Chromatin Binding, Synaptic Membrane

Application Details

Application Notes:	WB,1:500 - 1:2000
Comment:	HIGH QUALITY
Restrictions:	For Research Use only

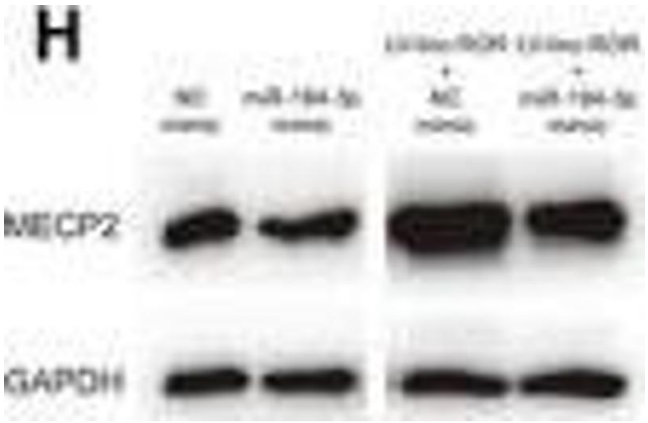
Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
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:	Store at -20°C. Avoid freeze / thaw cycles.

Publications

Product cited in:	Liu, Lai, Ma, Ke, Zhang, Liu, Zhang, Pei, Li, Yi, Shu, Shang, Liang, Huang: "CDYL suppresses epileptogenesis in mice through repression of axonal Nav1.6 sodium channel expression." in: **Nature communications**, Vol. 8, Issue 1, pp. 355, (2017) (PubMed).

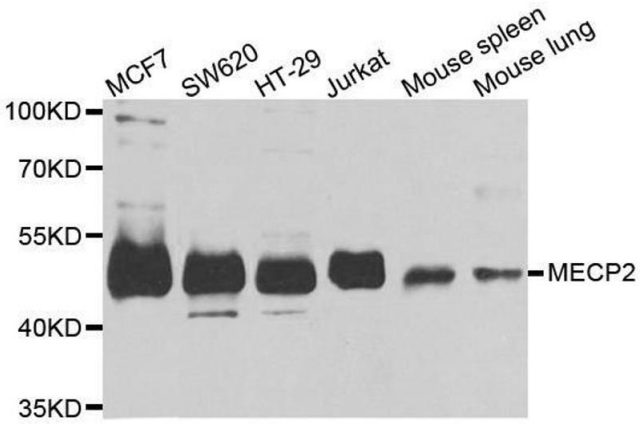
Images



Western Blotting

Image 1. linc-ROR promoted cell proliferation, migration, and invasion of breast cancer through linc-ROR/miR-194-3p/MECP2 regulatory axis. (A) CCK8 proliferation assay revealed that the overexpression of miR-194-3p inhibited cell growth and the rescue of miR-194-3p reduced the promoting effect of linc-ROR on cell growth. (B-C) Transwell migration assay indicated that the overexpression of miR-194-3p inhibited the cell migration and the rescue of miR-194-3p expression reduced the promoting effect of linc-ROR on it. Pictures were captured under the microscope at 10x magnification, scale bar = 100 μm, and the quantitative analysis of the migration assay was performed. (D, E) Transwell invasion assay indicated that the overexpression of miR-194-3p inhibited cell invasion and the rescue of miR-194-3p expression reduced the promoting effect of linc-ROR on it. Pictures were captured under the microscope at 10x magnification, scale bar = 100 μm, and the quantitative analysis of the invasion assay was performed. (F-I) Western blot assays determined the expression level of MECP2 protein in cell lines, pictures of protein bands were captured, and the gray value of them was calculated by Image J. (F, G) linc-ROR upregulated the protein level of MECP2, (H, I) miR-194-3p downregulated the protein level of MECP2, and the rescue of miR-194-3p reduced the upregulating effect of linc-ROR on MECP2. 'miR-194-3p mimic/NC mimic': overexpression of miR-194-3p/its negative control in MCF-7 cell line, 'LV-linc-ROR + miR-194-3p mimic/NC mimic':

rescue/not rescue the expression of miR-194-3p in linc-ROR-overexpressing MCF-7 cell line, *P < 0.05, **P < 0.01, ***P < 0.001, ****P < 0.0001, error bars represent SEM. - figure provided by CiteAb. Source: PMID32335998



Western Blotting

Image 2. Western blot analysis of extracts of various cell lines, using MECP2 antibody.

Western Blotting

Image 3. linc-ROR promoted cell proliferation, migration, and invasion of breast cancer through linc-ROR/miR-194-3p/MECP2 regulatory axis. (A) CCK8 proliferation assay revealed that the overexpression of miR-194-3p inhibited cell growth and the rescue of miR-194-3p reduced the promoting effect of linc-ROR on cell growth. (B-C) Transwell migration assay indicated that the overexpression of miR-194-3p inhibited the cell migration and the rescue of miR-194-3p expression reduced the promoting effect of linc-ROR on it. Pictures were captured under the microscope at 10x magnification, scale bar = 100 μm, and the quantitative analysis of the migration assay was performed. (D, E) Transwell invasion assay indicated that the overexpression of miR-194-3p inhibited cell invasion and the rescue of miR-194-3p expression reduced the promoting effect of linc-ROR on it. Pictures were captured under the microscope at 10x magnification, scale bar = 100 μm, and the quantitative analysis of the invasion assay was performed. (F-I) Western blot assays determined the expression level of MECP2 protein in cell lines, pictures of protein bands were captured,

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