

Product datasheet

Anti-MeCP2 antibody ab2828

★★★★★ 27 [Abreviews](#) 86 [References](#) 5 [图像](#)

概述

| | |
|-------|--|
| 产品名称 | Anti-MeCP2抗体 |
| 描述 | 兔多克隆抗体to MeCP2 |
| 宿主 | Rabbit |
| 特异性 | This antibody detects methyl CpG binding protein 2 (MeCP2). |
| 经测试应用 | 适用于: ICC/IF, IHC-P, WB |
| 种属反应性 | 与反应: Mouse, Rat, Human |
| 免疫原 | 预测可用于: Non human primates, Amphibian, Cynomolgus monkey  |

Database link: [Q9Z2D6](#)

(Peptide available as [ab4912](#))

 [Run BLAST with](#)

 [Run BLAST with](#)

阳性对照

ICC/IF: C6 and C2C12 cells IHC: Rat and mouse brain tissue WB: HeLa cells

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

| | |
|------|--|
| 形式 | Liquid |
| 存放说明 | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. |
| 存储溶液 | Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 99% PBS |
| 纯度 | Immunogen affinity purified |

克隆
同种型

多克隆
IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab2828于以下的经测试应用

“应用说明”部分下显示的仅为推荐的起始稀释度；实际最佳的稀释度/浓度应由使用者检定。

| 应用 | Ab评论 | 说明 |
|--------|-----------------|--|
| ICC/IF | (3) | 1/100 - 1/200. |
| IHC-P | (1) | 1/200 - 1/2000. |
| WB | (11) | 1/1500. Detects a band of approximately 56 kDa (predicted molecular weight: 52.4 kDa). Recent lots of product ab2828 should detect the untruncated protein in human samples, 75 kDa band. Earlier lots detected the truncated version (55 kDa) in human and mouse samples. However in mouse samples, only a 55 kDa band is detected by all lots of the antibody. The difference between the earlier lots and |

靶标

功能

Chromosomal protein that binds to methylated DNA. It can bind specifically to a single methyl-CpG pair. It is not influenced by sequences flanking the methyl-CpGs. Mediates transcriptional repression through interaction with histone deacetylase and the corepressor SIN3A.

组织特异性

Present in all adult somatic tissues tested.

疾病相关

Defects in MECP2 may be a cause of Angelman syndrome (AS) [MIM:105830]; also known as happy puppet syndrome. AS is a neurodevelopmental disorder characterized by severe mental retardation, absent speech, ataxia, sociable affect and dysmorphic facial features. AS and Rett syndrome have overlapping clinical features.

Defects in MECP2 are the cause of mental retardation syndromic X-linked type 13 (MRXS13) [MIM:300055]. Mental retardation is a mental disorder characterized by significantly sub-average general intellectual functioning associated with impairments in adaptive behavior and manifested during the developmental period. MRXS13 patients manifest mental retardation associated with other variable features such as spasticity, episodes of manic depressive psychosis, increased tone and macroorchidism.

Defects in MECP2 are the cause of Rett syndrome (RTT) [MIM:312750]. RTT is an X-linked dominant disease, it is a progressive neurologic developmental disorder and one of the most common causes of mental retardation in females. Patients appear to develop normally until 6 to 18 months of age, then gradually lose speech and purposeful hand movements and develop microcephaly, seizures, autism, ataxia, intermittent hyperventilation, and stereotypic hand movements. After initial regression, the condition stabilizes and patients usually survive into adulthood.

Defects in MECP2 may be the cause of susceptibility autism X-linked type 3 (AUTSX3) [MIM:300496]. AUTSX3 is a pervasive developmental disorder (PDD), prototypically characterized by impairments in reciprocal social interaction and communication, restricted and stereotyped patterns of interests and activities, and the presence of developmental abnormalities

by 3 years of age.

Defects in MECP2 are the cause of encephalopathy neonatal severe due to MECP2 mutations (ENS-MECP2) [MIM:300673]. Note=The MECP2 gene is mutated in Rett syndrome, a severe neurodevelopmental disorder that almost always occurs in females. Although it was first thought that MECP2 mutations causing Rett syndrome were lethal in males, later reports identified a severe neonatal encephalopathy in surviving male sibs of patients with Rett syndrome. Additional reports have confirmed a severe phenotype in males with Rett syndrome-associated MECP2 mutations.

Defects in MECP2 are the cause of mental retardation syndromic X-linked Lubs type (MRXSL) [MIM:300260]. Mental retardation is characterized by significantly below average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. MRXSL patients manifest mental retardation associated with variable features. They include swallowing dysfunction and gastroesophageal reflux with secondary recurrent respiratory infections, hypotonia, mild myopathy and characteristic facies such as downslanting palpebral fissures, hypertelorism and a short nose with a low nasal bridge. Note=Increased dosage of MECP2 due to gene duplication appears to be responsible for the mental retardation phenotype.

序列相似性

Contains 2 A.T hook DNA-binding domains.

Contains 1 MBD (methyl-CpG-binding) domain.

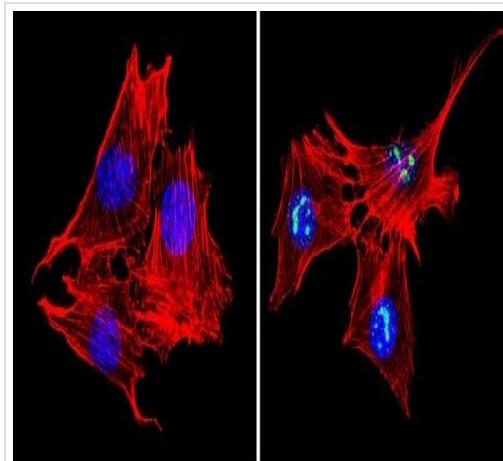
翻译后修饰

Phosphorylated on Ser-423 in brain upon synaptic activity, which attenuates its repressor activity and seems to regulate dendritic growth and spine maturation.

细胞定位

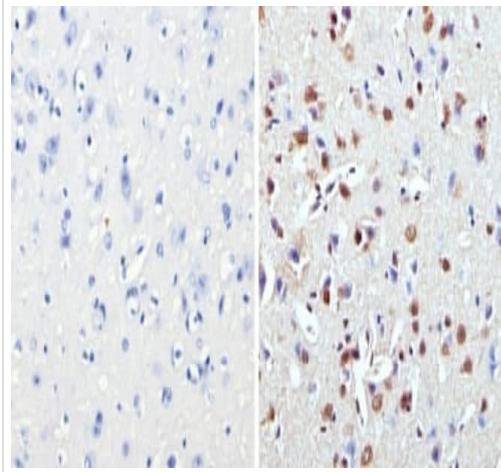
Nucleus. Colocalized with methyl-CpG in the genome.

图片



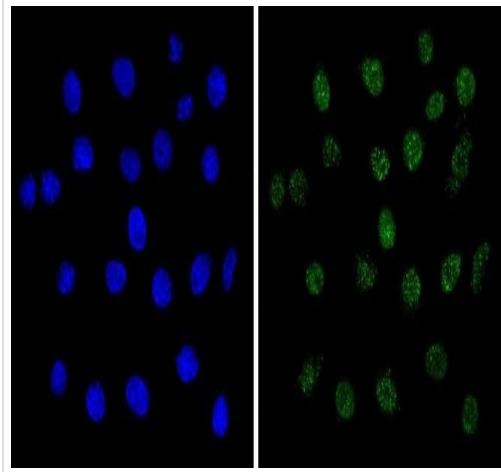
Immunocytochemistry/ Immunofluorescence - Anti-MeCP2 antibody (ab2828)

Immunocytochemistry/Immunofluorescence of C2C12 cells labeling Methyl CpG Binding Protein 2 (green) with ab2828 at a dilution of 1/200. Cells with primary antibody (right) compared to negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with polyclonal antibody in 3% BSA-PBS and incubated overnight at 4°C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. Actin was stained using Alexa Fluor 554 (red) and nuclei were stained with Hoechst or DAPI (blue).



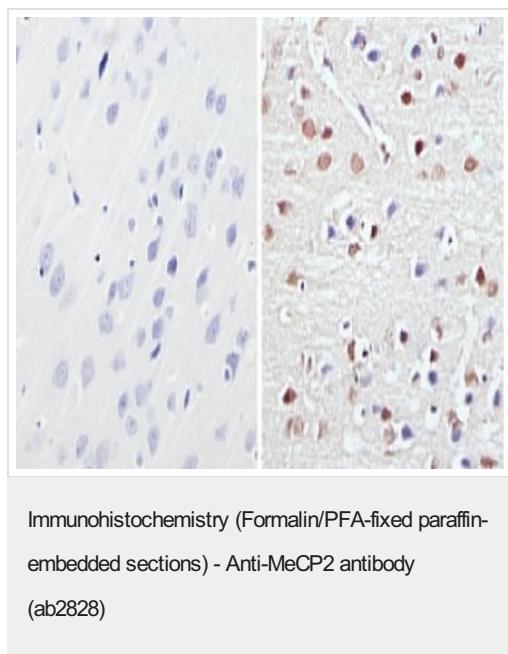
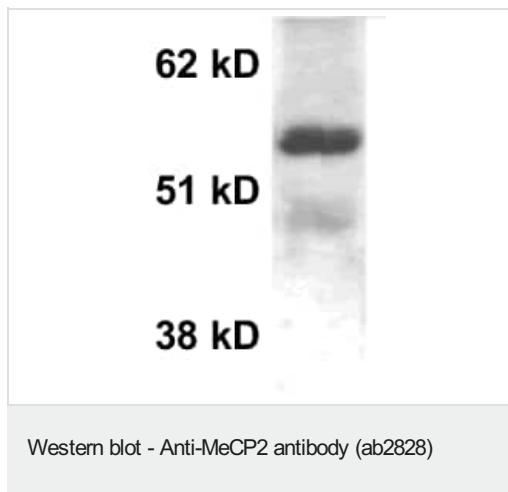
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MeCP2 antibody (ab2828)

Immunohistochemistry analysis of mouse brain tissue staining MeCP2 with ab2828 (dilution 1/1000 in 3 % BSA-PBS). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H₂O₂-methanol for 15 min at room temperature, washed with ddH₂O and PBS, and then probed with ab2828 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunocytochemistry/ Immunofluorescence - Anti-MeCP2 antibody (ab2828)

Immunocytochemistry/Immunofluorescence of C6 cells labeling Methyl CpG Binding Protein 2 (green) with ab2828 at a dilution of 1/200. Cells with primary antibody (right) compared to negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with polyclonal antibody in 3% BSA-PBS and incubated overnight at 4°C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. Nuclei were stained with Hoechst or DAPI (blue). Images were taken at a magnification of 60x.



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