

### Anti-MeCP2 antibody ab2828

★★★★★ [27 Abreviews](#) [86 References](#) [画像数 5](#)

#### 製品の概要

製品名	Anti-MeCP2 antibody
製品の詳細	Rabbit polyclonal to MeCP2
由来種	Rabbit
特異性	This antibody detects methyl CpG binding protein 2 (MeCP2).
アプリケーション	<b>適用あり:</b> ICC/IF, IHC-P, WB
種交差性	<b>交差種:</b> Mouse, Rat, Human <b>交差が予測される動物種:</b> Non human primates, Amphibian, Cynomolgus monkey 
免疫原	Synthetic peptide corresponding to Mouse MeCP2 aa 1-15. Sequence: MVAGMLGLREEKSED  Database link: <a href="#">Q9Z2D6</a> (Peptide available as <a href="#">ab4912</a> )   <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
ポジティブ・コントロール	ICC/IF: C6 and C2C12 cells IHC: Rat and mouse brain tissue WB: HeLa cells
特記事項	<p>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.</p> <p>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&amp;As</p>

#### 製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 99% PBS
精製度	Immunogen affinity purified

ポリモノ  
アイソタイプ

ポリクローナル  
IgG

## アプリケーション

**The Abpromise guarantee**      **Abpromise保証は、次のテスト済みアプリケーションにおけるab2828の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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

## ターゲット情報

機能	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.
組織特異性	Present in all adult somatic tissues tested.
関連疾患	<p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>

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 adaptive 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.

#### 配列類似性

Contains 2 A.T hook DNA-binding domains.

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

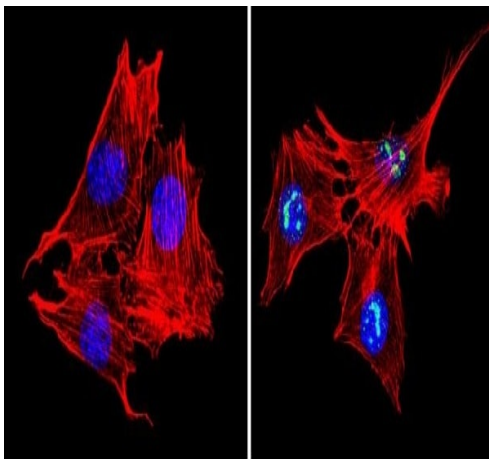
#### 翻訳後修飾

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

#### 細胞内局在

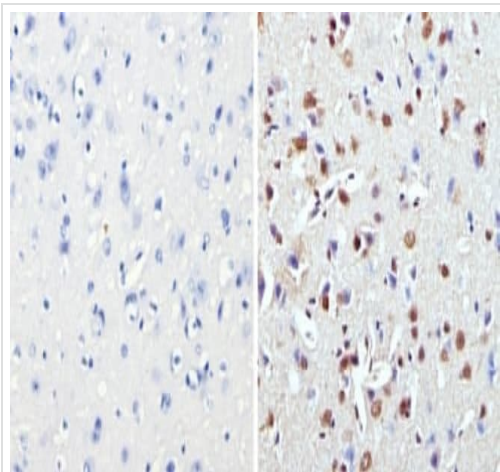
Nucleus. Colocalized with methyl-CpG in the genome.

#### 画像



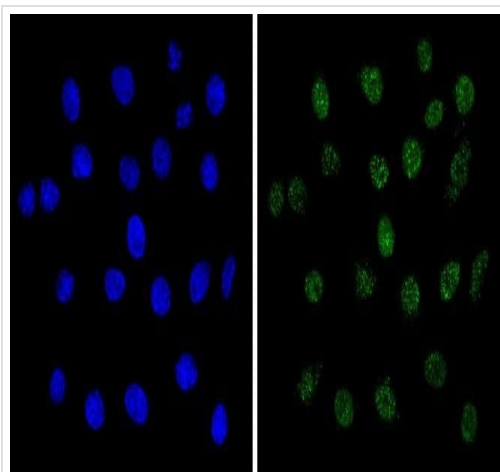
Immunocytochemistry/ Immunofluorescence - Anti-MeCP2 antibody (ab2828)

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).



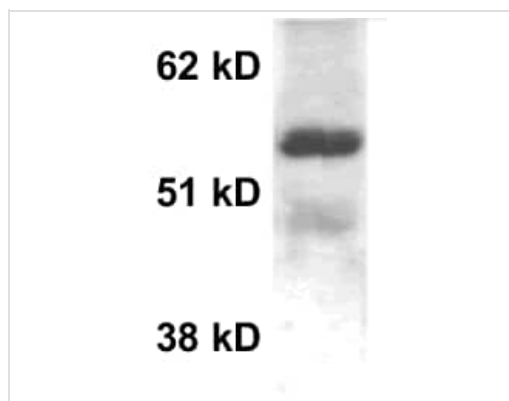
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MeCP2 antibody (ab2828)

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% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O 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.



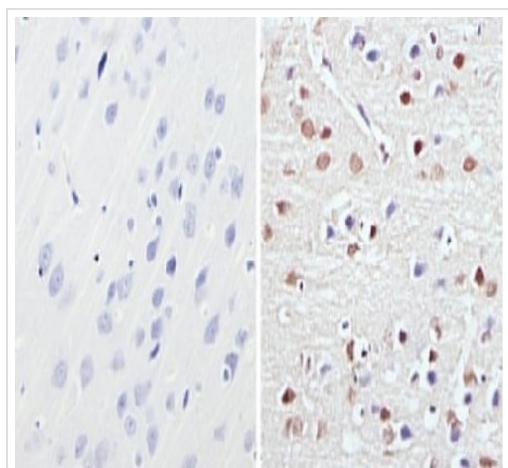
Immunocytochemistry/ Immunofluorescence - Anti-MeCP2 antibody (ab2828)

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.



Western blot - Anti-MeCP2 antibody (ab2828)

Western blot using ab2828 on HeLa cells. Western blot using ab2828 on HeLa cells.



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

Immunohistochemistry analysis of rat 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% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O 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.

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