

## Anti-MeCP2 Antibody

Our Anti-MeCP2 primary antibody from PhosphoSolutions is mouse monoclonal. It detects human, mouse, Catalog # AN1442

## Specification

## Anti-MeCP2 Antibody - Product Information

Application	WB, IHC
Primary Accession	<u>P51608</u>
Reactivity	Bovine
Host	Mouse
Clonality	Monoclonal
Isotype	lgG2b
Calculated MW	52441

## **Anti-MeCP2 Antibody - Additional Information**

Gene ID

4204

**Other Names** 

AUTSX 3 antibody, AUTSX3 antibody, DKFZp686A24160 antibody, Mbd 5 antibody, Mbd5 antibody, MECP 2 antibody, MeCP 2 protein antibody, MeCP-2 protein antibody, Mecp2 antibody, MECP2\_HUMAN antibody, Methyl CpG binding protein 2 (Rett syndrome) antibody, Methyl CpG binding protein 2 antibody, Methyl-CpG-binding protein 2 antibody, MRX 16 antibody, MRX 79 antibody, MRX16 antibody, MRX79 antibody, MRXS 13 antibody, MRXS13 antibody, MRXSL antibody, PPMX antibody, RS antibody, RTS antibody, RTT antibody, WBP 10 antibody, WBP10 antibody

#### Target/Specificity

MeCP2 (Methyl-CpG Binding Protein 2) is a chromosomal protein that binds to methylated DNA. It can bind specifically to a single methyl-CpG pair and is not influenced by sequences flanking the methyl-CpGs. MeCP2 has been shown to mediate transcriptional repression through interaction with histone deacetylase and the corepressor SIN3A (Nan et al., 1998). Defects in MeCP2 are the cause of Rett syndrome (RTT) (Amir et al., 1999). 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.

**Dilution** WB~~1:1000 IHC~~1:100~500

Format Protein G Purified

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Anti-MeCP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



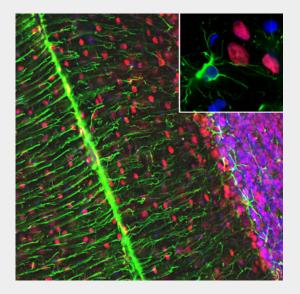
Shipping Blue Ice

# **Anti-MeCP2 Antibody - Protocols**

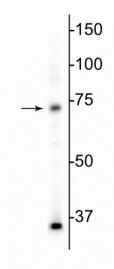
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

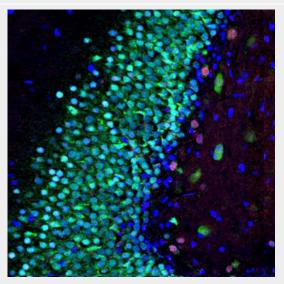
## **Anti-MeCP2 Antibody - Images**



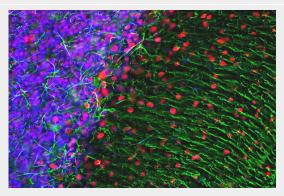
Immunofluorescence of a section of rat cerebellum showing specific labeling of MeCP2 (cat. 1205-MeCP2, 1:1000, red) in nuclei of neurons and specific labeling of GFAP (cat. 621-GFAP, 1:5000, green) in the network of astroglial cells and projections of Bergmann glia, and Hoechst staining of nuclear DNA.



Western blot of mouse whole brain lysate showing specific immunolabeling of the MeCP2 protein at  $\sim$ 75 kDa.



Immunostaining of a section of rat hippocampus showing specific nuclear immunolabeling of MeCP2 (cat. 1205-MECP2, red, 1:1000) and FOX3 (green). The blue is DAPI staining of nuclear DNA.



Immunofluorescence of a section of rat cerebellum labeled with anti-MeCP2 (cat. 1205-MECP2, 1:500, red), colabeled with anti-GFAP (cat. 620-GFAP, 1:5000, green), and DAPI staining of nuclear DNA. The anti-GFAP labels the astrocytic cells and the processes of Bergmann glia in the molecular layer.



# Anti-MeCP2 Antibody - Background

MeCP2 (Methyl-CpG Binding Protein 2) is a chromosomal protein that binds to methylated DNA. It can bind specifically to a single methyl-CpG pair and is not influenced by sequences flanking the methyl-CpGs. MeCP2 has been shown to mediate transcriptional repression through interaction with histone deacetylase and the corepressor SIN3A (Nan et al., 1998). Defects in MeCP2 are the cause of Rett syndrome (RTT) (Amir et al., 1999). 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.