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Phospho-Ser80 MECP2 Antibody
Rabbit polyclonal antibody
Catalog # AN1198

Specification

Phospho-Ser80 MECP2 Antibody - Product Information

Application	**WB**
Primary Accession	P51608
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**75 KDa**

Phospho-Ser80 MECP2 Antibody - Additional Information

Gene ID	**4204**
Gene Name	**MECP2**

Other Names
Methyl-CpG-binding protein 2, MeCp-2 protein, MeCp2, MECP2

Target/Specificity
Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser80 conjugated to KLH.

Dilution
WB~~ 1:1000

Format
serum

Antibody Specificity
Specific for the ~75 kDa MECP2 protein phosphorylated at Ser80 in Western blots of human, rat and mouse brain extracts. The antibody has also been used successfully for immunohistochemistry on mouse brain sections.

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
Phospho-Ser80 MECP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

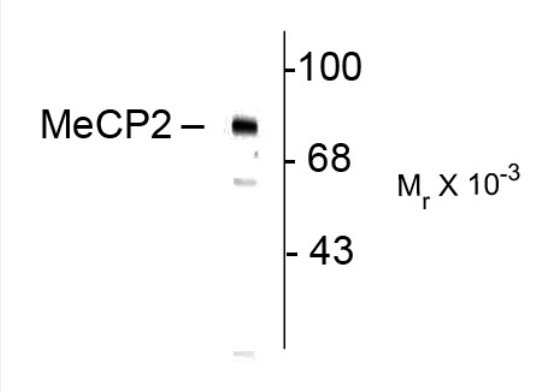
Phospho-Ser80 MECP2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-Ser80 MECP2 Antibody - Images



Western blot of neonatal rat brain showing specific immunolabelingof the ~ 75k MeCP2 protein phosphorylated at Ser80.

Phospho-Ser80 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. Defects in MECP2 are the cause of Rett syndrome (RTT). 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. Recent studies have reported a new phosphorylation site at Ser80. Phosphorylation and dephosphorylation of this site may be involved in modulating the dynamic function of MECP2 in neurons transiting between resting and active states within neural circuits that underlie behaviors. (Tao et al., 2009)

Phospho-Ser80 MECP2 Antibody - References

Tao J, Hu K, Chang Q, Wu H, Sherman NE, Martinowich K, Klose RJ, Schanen C, Jaenisch R, Wang W, Sun YE (2009) Phosphorylation of MeCP2 at Serine 80 regulates its chromatin association and neurological function. Proc Natl Acad Sci U S A.106(12):4882-7.