

Rabbit MeCP2 Polyclonal Antibody | anti-MeCP2 antibody

MeCP2 (Ser-421), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71670	Rabbit	Human, Rat, Mouse	Immunocytochemistry, ELISA, Western Blot

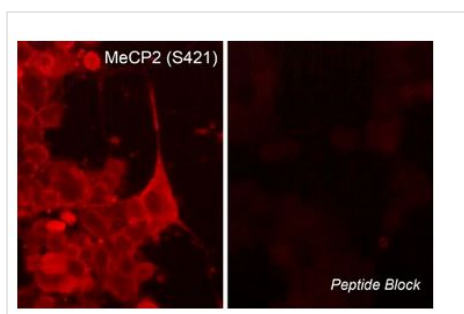
PRODUCT SYNONYMS

MeCP2; Polyclonal Antibody; MeCP2 (Ser-421); phospho-specific Antibody; phospho-specific; MeCP2 421; anti-MeCP2 antibody

PRODUCT SPECIFICATIONS

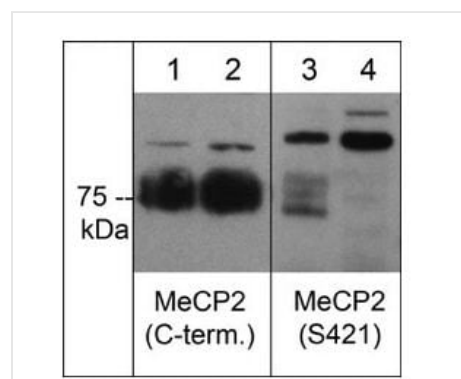
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	This antibody was affinity purified using phospho-MeCP2 (Ser-421) peptide (without carrier). The antibody detects a 75kDa* protein corresponding to the molecular mass of MeCP2 on SDS-PAGE immunoblots of human PC3 cells treated with calyculin A and in mouse brain tissue. These reactivities are not observed after lambda phosphatase treatment.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-MeCP2 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	phospho-MeCP2 (Ser-421) synthetic peptide (coupled to KLH) corresponding to amino acid residues surrounding serine 421 in mouse MeCP2. This peptide sequence is highly conserved in rat and human MeCP2, and has low homology to other nuclear proteins.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of MeCP2 phosphorylation in rat PC12 cells differentiated with NGF. The cells were probed with MeCP2 (Ser-421) rabbit polyclonal antibody (MP4611) in the absence (left) or presence (right) of blocking peptide (MX4615). The antibody was detected using appropriate secondary antibody conjugated to DyLight 594.



WB (Western Blot)

Western blot of human PC3 cells treated with calyculin A (25mM) for 15 min. The blot lanes were untreated (lanes 1 & 3) or treated with lambda phosphatase (lanes 2 & 4) then probed with rabbit polyclonals anti-MeCP2 (C-terminus) (lanes 1 & 2) or anti-MeCP2 (Ser-421) (lanes 3 & 4).

ADDITIONAL INFORMATION

Related Product Information for anti-MeCP2 antibody	Methyl-CpG Binding Protein 2 (MeCP2) was identified based on its affinity for methylated cytosines within DNA. As a chromatin-associated multifunctional protein, MeCP2 has been implicated in regulation of transcription and chromatin structure. Mutations of MeCP2 cause Rett syndrome, which results from neuronal dysfunction and impairment in cognitive and motor functions. Regulation of MeCP2 activity may involve phosphorylation at multiple sites. Ser-421 in MeCP2 is phosphorylated in response to neuronal activity, calcium influx, and is dependent on Cam-KII. Alanine mutation of Ser-421 leads to defects in synapse development and activity. Ser-80 in MeCP2 is phosphorylated in HeLa nuclear extracts and neurons. Alanine mutation of Ser-80 attenuates MeCP2 chromatin association and leads to locomotor deficits in transgenic knock-in mice. Thus, phosphorylation of MeCP2 may be important for altering its function during neuronal activity.
References	Cohen, S. et al. (2011) Neuron 72:72. Tao, J. et al. (2009) PNAS 106(12):4882. Lewis, J.D. et al. (1992). Cell 69:905.

NCBI AND UNIPROT INFORMATION

NCBI GI #	126517469
NCBI GeneID	17257
NCBI Accession #	NP_001075448.1
NCBI GenBank Nucleotide #	NM_001081979.2
UniProt Accession #	Q9Z2D6; Q3TYG1; B1AUZ2; B1AUZ3
Molecular Weight	53,576 Da
NCBI Official Full Name	methyl-CpG-binding protein 2 isoform 1
NCBI Official Synonym Full Names	methyl CpG binding protein 2
NCBI Official Symbol	Mecp2
NCBI Official Synonym Symbols	Mbd5; WBP10; 1500041B07Rik; D630021H01Rik
NCBI Protein Information	methyl-CpG-binding protein 2
UniProt Protein Name	Methyl-CpG-binding protein 2
UniProt Gene Name	Mecp2
UniProt Synonym Gene Names	MeCp-2 protein; MeCp2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/mecp2-antibody-immunocytochemistry-western-blot-elisa/71670>