

## ARG52332 anti-MeCP2 phospho (Ser421) antibody

Package: 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes MeCP2 phospho (Ser421)
Tested Reactivity	Ms
Predict Reactivity	Hu, NHuPrm
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MeCP2
Species	Mouse
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser421 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	MRXSL; RS; MeCp2; Methyl-CpG-binding protein 2; MeCp-2 protein; RTT; AUTSX3; RTS; MRX79; PPMX; MRXS13; MRX16

### Application Instructions

Application table	Application	Dilution
	WB	1:1000

**Application Note**  
Specific for the ~55 kDa truncated MeCP2 protein phosphorylated at Ser421. Immunolabeling of the MeCP2 band is blocked by preadsorption with the phospho-peptide used as antigen but not by the corresponding dephospho-peptide.  
\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

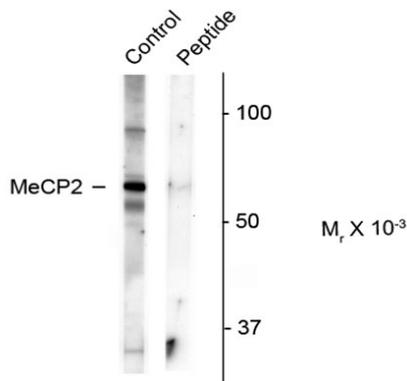
### Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Database links	<a href="#">GeneID: 17257 Mouse</a> <a href="#">Swiss-port # Q9Z2D6 Mouse</a>
Gene Symbol	MECP2
Gene Full Name	methyl CpG binding protein 2
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. Recent studies have reported a new phosphorylation site at Ser421. Phosphorylation and dephosphorylation of this site may be involved in regulation of behavioral responses to chronic antidepressant treatment (Hutchinson et al., 2012).
Research Area	Gene Regulation antibody; Neuroscience antibody
Calculated Mw	52 kDa
PTM	Phosphorylated on Ser-423 in brain upon synaptic activity, which attenuates its repressor activity and seems to regulate dendritic growth and spine maturation.

## Images



ARG52332 anti-MeCP2 phospho (Ser421) antibody WB image

Western blot: Mouse whole brain showing specific immunolabeling of the ~ 55 kDa truncated MeCP2 protein phosphorylated at Ser421 by using ARG52332 anti-MeCP2 phospho (Ser421) antibody. Immunolabeling is greatly reduced by preadsorption with the phospho-peptide used as antigen (peptide).