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# Anti-MeCP2 (C-terminus) Antibody

Catalog # AN1836

## Product Information

| | |
|---|---|
| **Application** | WB, ICC |
| **Primary Accession** | Q9Z2D6 |
| **Host** | Rabbit |
| **Clonality** | Rabbit Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 52307 |

## Additional Information

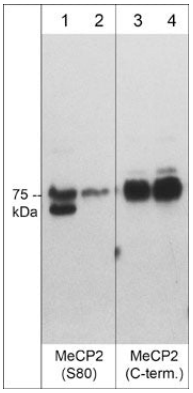
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|---|---|
| **Gene ID** | 17257 |
| **Other Names** | Methyl-CpG-Binding2 |
| **Target/Specificity** | Methyl-CpG Binding Protein 2 (MeCP2) was identified based on its affinity for methylated cytosines within DNA. As a chromatin-associated multifunctional 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. |
| **Dilution** | WB~~1:1000 ICC~~N/A |
| **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 (C-terminus) Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |
| **Shipping** | Blue Ice |

## Background

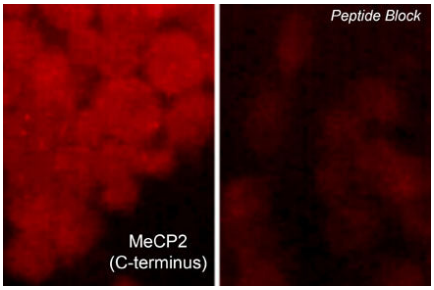
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activity, calcium influx, and is dependent on Cam-KII. Alanine mutation of Ser-421 leads to defects in synapse development and activity. Ser-80 in MeCP2 is phosphorylated in HeLa nuclear extracts and neurons. Alanine mutation of Ser-80 attenuates MeCP2 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.

## Images




Western blot of adult mouse brain tissue lysate. The blot lanes were untreated (lanes 1 & 3) or treated with lambda phosphatase (lanes 2 & 4) then probed with rabbit polyclonals anti-MeCP2 (Ser-80) (lanes 1 & 2) or anti-MeCP2 (C-terminus) (lanes 3 & 4).




Immunocytochemical labeling of MeCP2 in rat PC12 cells differentiated with NGF. The cells were probed with MeCP2 (C-terminus) rabbit polyclonal antibody (AN1836) in the absence (left) or presence (right) of blocking peptide (MX4595). The antibody was detected using appropriate secondary antibody conjugated to DyLight® 594.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.