

## MECP2 Polyclonal Antibody

Catalog number: 10861-1-AP

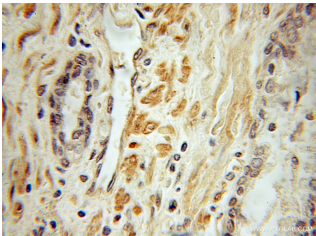
Size: 27 µg/150 µl

Source: Rabbit

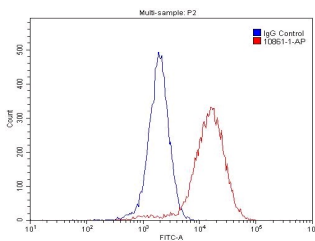
Isotype: IgG

Synonyms:

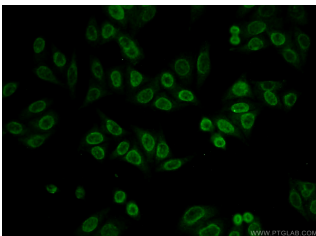
MECP2; AUTSX3,  
DKFZp686A24160, MeCp 2  
protein, MECP2, Methyl CpG  
binding protein 2, MRX16,  
MRX79, MRXS13, MRXSL,  
PPMX, RTS, RTT



Immunohistochemical of paraffin-embedded human prostate cancer using 10861-1-AP (MECP2 antibody) at dilution of 1:50 (under 10x lens)



1X10<sup>6</sup> NIH/3T3 cells were stained with 0.2ug MECP2 antibody (10861-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.



Immunofluorescent analysis of HepG2 cells using 10861-1-AP (MECP2 Antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)

### Background

METHYL-CpG-BINDING PROTEIN 2 (MECP2), is a chromatin-associated protein that can both activate and repress transcription. Mecp2 in the adult mouse is high in the brain, lung, and spleen, lower in heart and kidney. MECP2 takes part in the control of neuronal activity-dependent gene regulation, and this process may underlie the pathology of Rett syndrome, a severe developmental disorder with autistic phenotypes. As compared to wild-type monkeys, MECP2 transgenic monkeys exhibited a higher frequency of repetitive circular locomotion and increased stress responses, as measured by the threat-related anxiety and defensive test. Chromosomal protein that binds to methylated DNA. It can bind specifically to a single methyl-CpG pair. It is not influenced by sequences flanking the methyl-CpGs. Mediates transcriptional repression through interaction with histone deacetylase and the corepressor SIN3A. Two isoforms of MECP2 exist due to alternative splicing events. This antibody reacts with the MECP2 and phosphorylated MECP2 proteins.

### Applications

<b>Tested applications:</b>	ELISA, IHC, WB, IF, IP, FC
<b>Cited applications:</b>	IF, IHC, WB
<b>Species specificity:</b>	Human, Mouse, Rat; other species not tested.
<b>Cited species:</b>	Human, rat
<b>Calculated MECP2 MW:</b>	52 kDa, 53 kDa
<b>Observed MECP2 MW:</b>	75 kDa
<b>Positive WB detected in</b>	MDA-MB-453s cells, human brain tissue, mouse heart tissue, mouse lung tissue, mouse ovary tissue, SH-SY5Y cells
<b>Positive IP detected in</b>	MCF-7 cells
<b>Positive IHC detected in</b>	Human prostate cancer tissue, human brain tissue
<b>Positive IF detected in</b>	HepG2 cells
<b>Positive FC detected in</b>	NIH/3T3 cells
<b>Recommended dilution:</b>	WB: 1:200-1:2000 IP: 1:200-1:2000 IHC: 1:20-1:200 IF: 1:20-1:200 FC: N/A

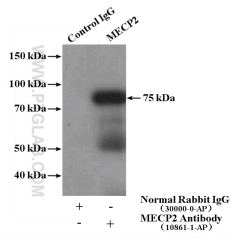
Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

### Immunogen information

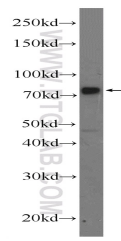
<b>Immunogen:</b>	Ag1309
<b>GenBank accession number:</b>	BC011612
<b>Gene ID (NCBI):</b>	4204
<b>Full name:</b>	Methyl CpG binding protein 2 (Rett syndrome)

### Product information

<b>Purification method:</b>	Antigen affinity purification
<b>Storage:</b>	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.



**IP Result of anti-MECP2**  
**(IP:10861-1-AP, 4ug;**  
**Detection:10861-1-AP 1:500)**  
**with MCF-7 cells lysate**  
**1280ug.**



**MDA-MB-453s cells were**  
**subjected to SDS PAGE**  
**followed by western blot with**  
**10861-1-AP( MECP2**  
**Antibody) at dilution of 1:600**