

**Datasheet for 600-401-X39****MeCP2 Antibody****Overview**

|                      |                                            |
|----------------------|--------------------------------------------|
| <b>Description:</b>  | Anti-MeCP2 (RABBIT) Antibody - 600-401-X39 |
| <b>Item No.:</b>     | 600-401-X39                                |
| <b>Size:</b>         | 50 µg                                      |
| <b>Applications:</b> | ChIP, ELISA, WB                            |
| <b>Reactivity:</b>   | Human                                      |
| <b>Host Species:</b> | Rabbit                                     |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | MeCP2 is a chromosomal protein with abundant binding sites in the chromatin. It belongs to the family of methyl CpG binding proteins which also comprises MBD1, MBD2, MBD3 and MBD4. MeCP2 can bind specifically to methylated promoters, thereby repressing transcription. This transcriptional repression is mediated through interaction with histone deacetylase and the corepressor SIN3A. MeCP2 also is essential for development. Mutations in MeCP2 are the cause of several types of mental retardation including Rett syndrome, a progressive neurological disorder that causes mental retardation in females and mental retardation syndromic X-linked type 13, and may also be involved in Angelman syndrome and susceptibility to some types of autism. Anti-MeCP2 Antibody is ideal for research in Epigenetics, Embryonic Development and Neuroscience. |
| <b>Synonyms:</b>     | Methyl-CpG-binding protein 2, MeCP-2 protein, AUTSX3, MRX16, MRX79, MRXS13, MRXSL, PPMX, RTS, RTT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**Target Details**

|                        |                    |
|------------------------|--------------------|
| <b>Gene Name:</b>      | MECP2              |
| <b>Reactivity:</b>     | Human              |
| <b>Immunogen Type:</b> | Conjugated Peptide |

|                            |                                                                                                                                                                              |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Anti-MeCP2 Antibody was produced in rabbits by repeated immunizations with a synthetic peptide containing the C-terminal region of human MeCP2.                              |
| <b>Purity/Specificity:</b> | Anti-MeCP2 Antibody was purified by affinity purification. This product reacts with human MeCP2. Cross reactivity with MeCP2 from species other than human is not known.     |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P51608</a></li><li>• <a href="#">GeneID - 4204</a></li><li>• <a href="#">NCBI - NP_001104262.1</a></li></ul> |

## Application Details

|                             |                                                                                                                                                                                                                                                 |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ChIP, ELISA, WB                                                                                                                                                                                                                                 |
| <b>Application Note:</b>    | Anti-MeCP2 Antibody is tested for Chromatin Immunoprecipitation, ELISA and Western Blots. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 70 kDa in the appropriate cell lysate or extract. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                 |
| <b>ChIP:</b>                | 5 µg per IP                                                                                                                                                                                                                                     |
| <b>ELISA:</b>               | 1:1,000                                                                                                                                                                                                                                         |
| <b>WB:</b>                  | 1:1,000                                                                                                                                                                                                                                         |

## Formulation

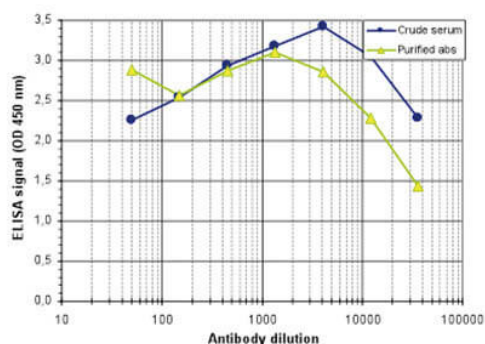
|                        |                                                         |
|------------------------|---------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                               |
| <b>Concentration:</b>  | 0.75ug/ul by UV absorbance at 280 nm                    |
| <b>Buffer:</b>         | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.05% (w/v) Sodium Azide and 0.05% ProClin 300          |
| <b>Stabilizer:</b>     | None                                                    |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                               |
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| <b>Shipping Condition:</b> | Dry Ice                                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Condition:</b>  | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |

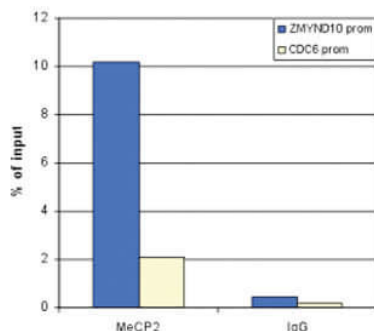
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



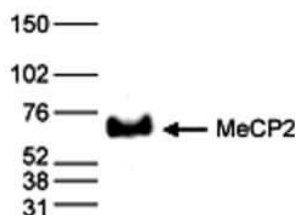
### ELISA

ELISA results of Rabbit anti-MeCP2 antibody. Antigen: BSA conjugated MeCP2 peptide. Coating amount: 0.1 µg per well. Primary Antibody: MeCP2 antibody and crude serum. Dilution series: serial dilution. Estimated Antibody Titer to be 1:32,900. Substrate: TMB (p/n TMBE-1000).



### ChIP

Chromatin Immunoprecipitation performed with rabbit Anti-MeCP2 antibody. ChIP assays were performed using human osteosarcoma (U2OS) cells, the antibody against MeCP2, and optimized PCR primer sets. Sheared chromatin from 1x10<sup>6</sup> cells and 5 µg of antibody were used per ChIP experiment. IgG (1 µg/IP) was used as a negative IP control. Quantitative PCR was performed with primers for the promoters of the ZMYND10 gene (used as a positive control) and CDC6 gene (used as a negative control). This image displays the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).

**Western Blot**

Western Blot results of Rabbit anti-MeCP2 antibody. Lane 1: HeLa nuclear extracts. Load: 40 µg. Primary antibody: anti-MeCP2 antibody at 1:1,000 overnight at 4°C. Secondary Antibody: anti-rabbit HRP at 1:10,000 for 1hr at RT. Block: TBS-Tween / 5% BLOTTO.

**Disclaimer**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.