



Anti-human MBD-3 Antibody

ORDERING INFORMATION

Catalog Number: AF3839

Lot Number: YDM01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human MBD-3

Immunogen: *E. coli*-derived rhMBD-3 isoform 2

Ig Type: goat IgG

Applications: Western blot
Direct ELISA

Background

MBD-3 (methyl-CpG-binding domain protein # 3) is a 38 - 40 kDa member of the MBD family of transcriptional repressors. Through its MBD, and as part of a large complex of regulatory proteins, it binds methylated DNA, promoting gene silencing during S phase. Although it can homodimerize, it is only active when heterodimerized with MBD-2. Human MBD-3 is 291 amino acids (aa) in length, and contains an N-terminal methyl binding domain (aa's 1 - 72) and a C-terminal coiled-coil region (aa's 216 - 245) that may be involved in protein-protein interaction. Human MBD-3 shares 95% aa identity with mouse, rat, and canine MBD-3, with differences essentially limited to the C-terminal 25 amino acids.

Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant human MBD-3 isoform 2 (rhMBD-3; aa 1 - 259; Accession # AAH43619). Human MBD-3 specific IgG was purified by human MBD-3 affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for its ability to recognize human MBD-3 in direct ELISAs and Western blots.

Applications

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human MBD-3. The detection limit for rhMBD-3 is approximately 5 ng/lane under non-reducing and reducing conditions.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human MBD-3. The detection limit for rhMBD-3 is approximately 0.5 ng/well.

Optimal dilutions should be determined by each laboratory for each application.