

## Recombinant MBD4-MBD protein

---

**Catalog No:** 81473, 81573

**Expressed In:** *E. coli*

**Quantity:** 100, 1000 µg

**Concentration:** 0.3 µg/µl

**Source:** Human

**Buffer Contents:** Recombinant MBD4-MBD protein is supplied in 25 mM Tris 8.0, 300mM NaCl, 20% glycerol, 0.5 mM TCEP.

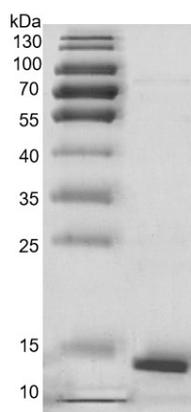
**Background:** **MBD4 (Methyl-CpG-binding domain protein 4)** can mismatch-specific DNA N-glycosylase involved in DNA repair. Has thymine glycosylase activity and is specific for G:T mismatches within methylated and unmethylated CpG sites. Can also remove uracil or 5-fluorouracil in G:U mismatches. Has no lyase activity. Was first identified as methylCpG-binding protein.

**Protein Details:** Recombinant MBD4-MBD protein that includes amino acids 71-159 of human MBD4 protein (accession number NP\_003916.1) was expressed in *E. coli* cells with an N-terminal 6xHis tag. The molecular weight of the protein is 12.31 kDa.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

### MBD4-MBD



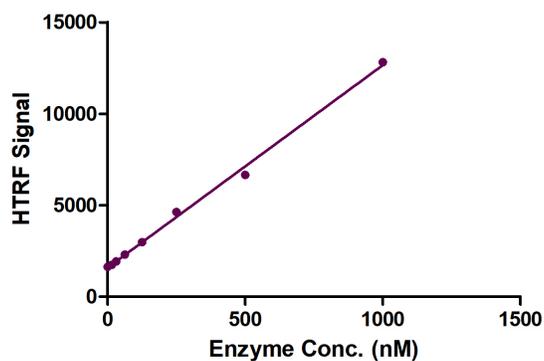
### MBD4-MBD protein gel.

12.5% SDS-PAGE gel stained with Coomassie Blue.

MW: 12.31 kDa

Purity: >95%

### MBD4-MBD Titration



### HTRF assay for MBD4-MBD activity

1  $\mu$ M substrate DNA (5'-Biotin-GCAGCCGG/5mC/GCGAATC-3') were incubated with different concentrations of MBD4-MBD protein in HTRF binding buffer contain 50mM HEPES-NaOH pH 7.4, 0.1% BSA for 1 hour, Then 10  $\mu$ l detection reagents contain anti-His antibody (1:100) and SA-XL665 (1:100) diluted with 1 $\times$  Detection Buffer were added and incubated for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.