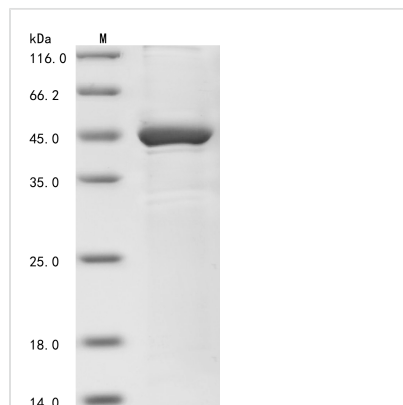




Recombinant Human Methyl-CpG-binding domain protein 2 (MBD2), partial

Product Code	CSB-EP890654HU1
Abbreviation	Recombinant Human MBD2 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9UBB5
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	ATESGKRMDCPALPPGWKKEEVIRKSGLSAGKSDVYYFSPSGKKFRSKPQLA RYLGNTVDLSSFDFTGKMMPSKLQKNKQRLRNDPLNQNKGKPDNLNTTLPIR QTASIFKQPVTKVTNHPSNKVKSDPQRMNEQPRQLFWEKRLQGLSASDVTEQ IIKTMELPKGLQGVGPGSNDETLLSAVASALHTSSAPITGQVSAAVEKNPAVWL NTSQPLCKAFIVTDEDIRKQEERVQQVRKKLEEALMADILSRAADTEEMDIEMD SGDEA
Research Area	Epigenetics and Nuclear Signaling
Source	E.coli
Target Names	MBD2
Expression Region	143-411aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-KSI-tagged
Mol. Weight	45.2 kDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant Human MBD2 was expressed with the amino acid range of 143-411. The theoretical molecular weight of the MBD2 protein is 45.2 kDa. This protein is generated in a e.coli-based system. The MBD2 coding gene included the N-terminal 6xHis-KSI tag, which simplifies the detection and purification processes of the recombinant MBD2 protein in following stages of expression and purification.

Methyl-CpG-binding domain protein 2 (MBD2) is a key epigenetic regulator that plays a crucial role in interpreting DNA methylation patterns in the genome. As a member of the MBD family, MBD2 specifically recognizes and binds to methylated CpG dinucleotides, influencing chromatin structure and gene expression. MBD2 is involved in gene silencing and transcriptional regulation by recruiting chromatin remodeling complexes and histone deacetylases to methylated DNA regions. It is implicated in various cellular processes, including embryonic development, genomic imprinting, and X-chromosome inactivation. Furthermore, MBD2 has been studied in the context of cancer, where alterations in DNA methylation patterns contribute to aberrant gene expression. Understanding the intricate functions of MBD2 provides insights into epigenetic mechanisms and their impact on cellular processes and disease.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.