

O-6-Methylguanine-DNA Methyltransferase Recombinant Protein | MGMT recombinant protein

Recombinant Human O-6-Methylguanine-DNA Methyltransferase

CATALOG #

AAA38775

PRODUCT SYNONYMS

O-6-Methylguanine-DNA Methyltransferase; Recombinant Human O-6-Methylguanine-DNA Methyltransferase; MGMT Human; Methylated-DNA--protein-cysteine methyltransferase; 6-O-methylguanine-DNA methyltransferase; O-6-methylguanine-DNA-alkyltransferase; MGMT; MGMT recombinant protein

PRODUCT SPECIFICATIONS

Purity/Purification	Greater than 95.0% as determined by SDS-PAGE.
Form/Format	The MGMT solution (0.5 mg/ml) contains 20mM Tris-HCl pH-7.5, 1mM DTT and 10% glycerol.
Sequence	MGSSHHH HHHSSGLVPR GSHMDK DCEMKRTTLD SPLGKLELSG CEQGLHEIKL LGKGTSAADA VEVPAPAAVL GGPEPLMQCT AWLNAYFHQP EAIEEFPVPA FHHPVFQQES FTRQVLWKLL KVVKFGEVIS YQQLAALAGN PKAARAVGGA MRGNPVPILI PCHRVVCSSG AVGNYSGGLA VKEWLLAHEG HRLGKPGGLGG SSGLAGAWLK GAGATSGSPP AGRN
Sequence Length	207
Source	E.coli
Physical Appearance	Sterile filtered colorless solution
Preparation and Storage	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA) Avoid multiple freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for MGMT recombinant protein	Description: MGMT Human Recombinant fused to a 20 amino acid His Tag at N-terminal produced in E Coli is a single, non-glycosylated, polypeptide chain containing 227 amino acids (1-207) and having a molecular mass of 23.8 kDa. The MGMT is purified by proprietary chromatographic techniques. Introduction: MGMT is an enzyme that repairs O-6-methylguanine, a mutagenic DNA base damaged by endogenous and environmental alkylating agents and takes part in the cellular defense against the biological effects of O-6-methylguanine in DNA. MGMT repairs alkylated guanine in DNA by stoichiometrically transferring the alkyl group at the O-6 position to a cysteine residue in the enzyme. abnormal MGMT expression correlates with the prognosis in human solid cancers. MGMT decrease of expression is correlated with methylation. The human MGMT is a negative regulator of estrogen receptor-mediated transcription upon alkylation DNA damage. MGMT promoter hypermethylation plays an important role in the early steps of colorectal carcinogenesis. Abnormal promoter hypermethylation of MGMT gene is associated with oral squamous cell carcinomas.
Product Categories/Family for MGMT recombinant protein	Enzymes; Transferase

NCBI AND UNIPROT INFORMATION

NCBI GI #	530394832
NCBI GeneID	4255

NCBI Accession #	XP_005252739.1
NCBI GenBank Nucleotide #	XM_005252682.1
UniProt Accession #	P16455 ; Q5VY78
Molecular Weight	21,646 Da
NCBI Official Full Name	methylated-DNA--protein-cysteine methyltransferase isoform X1
NCBI Official Synonym Full Names	O-6-methylguanine-DNA methyltransferase
NCBI Official Symbol	MGMT
NCBI Protein Information	methylated-DNA--protein-cysteine methyltransferase; 6-O-methylguanine-DNA methyltransferase; O-6-methylguanine-DNA-alkyltransferase; O6-methylguanine-DNA methyltransferase
UniProt Protein Name	Methylated-DNA--protein-cysteine methyltransferase
UniProt Gene Name	MGMT
UniProt Synonym Gene Names	MGMT
UniProt Entry Name	MGMT_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/mgmt-recombinant-protein/38775>