

## Recombinant Human MGMT Protein, His-tagged

Cat. No. MGMT-004H    Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human MGMT protein with a N-terminal His-tag was expressed in E. coli
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	Alkylating agents are potent carcinogens that can result in cell death, mutation and cancer. The protein encoded by this gene is a DNA repair protein that is involved in cellular defense against mutagenesis and toxicity from alkylating agents. The protein catalyzes transfer of methyl groups from O(6)-alkylguanine and other methylated moieties of the DNA to its own molecule, which repairs the toxic lesions. Methylation of the genes promoter has been associated with several cancer types, including colorectal cancer, lung cancer, lymphoma and glioblastoma.
<b>Molecular Mass</b>	26.8 kDa
<b>Purity</b>	≥50% estimated by SDS-PAGE
<b>Stability</b>	≥ 6 months
<b>Storage</b>	-80 centigrade
<b>Storage Buffer</b>	50 mM Tris, pH 8.0, 150 mM sodium chloride, 10% glycerol

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 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Shipping** Dry ice in continental US, may vary elsewhere.

## GENE INFORMATION

**Gene Name** [MGMT O-6-methylguanine-DNA methyltransferase\[ Homo sapiens \(human\) \]](#)

**Official Symbol** [MGMT](#)

**Synonyms**

MGMT; O-6-methylguanine-DNA methyltransferase; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Haplorrhini; Catarrhini; Hominidae; Homo; methylated-DNA--protein-cysteine methyltransferase; 6-O-methylguanine-DNA methyltransferase; O-6-methylguanine-DNA-alkyltransferase; O6-methylguanine-DNA methyltransferase; methylguanine-DNA methyltransferase; EC 2.1.1.63

**Gene ID** [4255](#)

**mRNA Refseq** [NM\\_002412](#)

**Protein Refseq** [NP\\_002403](#)

**MIM** [156569](#)

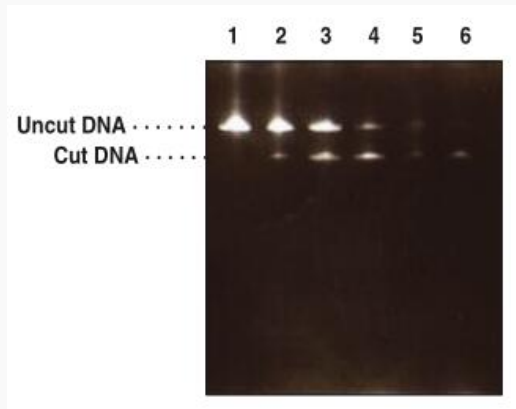
**UniProt ID** [P16455](#)

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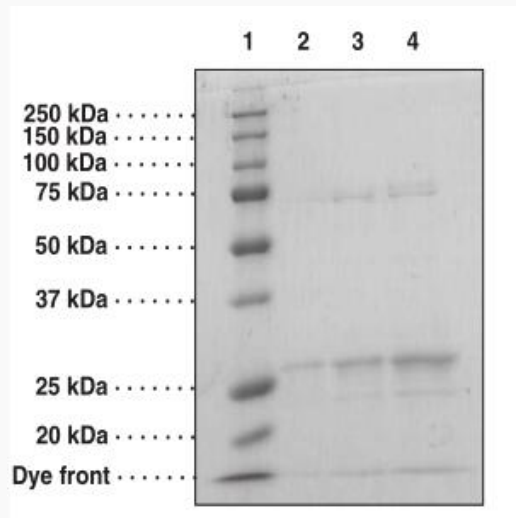
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**SDS-PAGE analysis  
of MGMT.**



Lane 1: MGMT (0 g)  
 Lane 2: MGMT (0.5 g)  
 Lane 3: MGMT (1.5 g)  
 Lane 4: MGMT (4.5 g)  
 Lane 5: MGMT (10 g)  
 Lane 6: Unmethylated DNA oligo

**ATPase Activity of  
MGMT**



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Lane 1: MW Markers


Lane 2: MGMT (1 g)

Lane 3: MGMT (2 g)

Lane 4: MGMT (4 g)

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