

## Recombinant Human MGMT Protein (His Tag)

Catalog No. PKSH032031

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

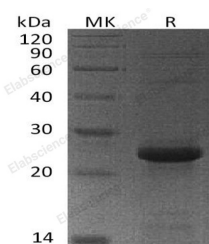
### Description

<b>Synonyms</b>	Methylated-DNA--protein-cysteine methyltransferase;6-O-methylguanine-DNAmethyltransferase;O-6-methylguanine-DNA-alkyltransferase;MGMT
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Met 1-Asn207
<b>Accession</b>	P16455
<b>Calculated Molecular Weight</b>	23.8 kDa
<b>Observed molecular weight</b>	25 kDa
<b>Tag</b>	N-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 90 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl,1mM DTT,1mM EDTA,500mM NaCl,0.1% Triton X-100,pH 8.0.
<b>Reconstitution</b>	Not Applicable

### Data



> 90 % as determined by reducing SDS-PAGE.

### Background

MGMT belongs to the family of transferases, specifically those transferring one-carbon group methyltransferases. MGMT involved in the cellular defense against the biological effects of O6-methylguanine in DNA. Repairs alkylated guanine in DNA by stoichiometrically transferring the alkyl group at the O-6 position to a cysteine residue in the enzyme. MGMT catalyzes the chemical reaction: DNA (containing 6-O-methylguanine) and proteinL-cysteine into DNA (without 6-O-

### For Research Use Only

methylguanine) and protein S-methyl-L-cysteine.