Recombinant Escherichia coli RDGB Protein (1-197 aa), His-SUMO-Myc-tagged

Cat. No. RDGB-2500E **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Escherichia coli (strain K12) RDGB Protein (1-197 aa) is produced by E. coli expression system. This protein is fused with a 10xHis-SUMO tag at the N-terminal and a Myc tag at the C-terminal. Protein Description: Full Length.
Species	E.coli
Source	E.coli
ProteinLength	1-197 aa
Description	Pyrophosphatase that catalyzes the hydrolysis of nucleoside triphosphates to their monophosphate derivatives, with a high preference for the non-canonical purine nucleotides XTP (xanthosine triphosphate), dITP (deoxyinosine triphosphate) and ITP. Can also efficiently hydrolyze 2'-deoxy-N-6-hydroxylaminopurine triphosphate (dHAPTP). Seems to function as a house-cleaning enzyme that removes non-canonical purine nucleotides from the nucleotide pool, thus preventing their incorporation into DNA/RNA and avoiding chromosomal lesions.To a much lesser extent,is also able to hydrolyze GTP, dGTP and dUTP, but shows very low activity toward the canonical nucleotides dATP, dCTP and dTTP and toward 8-oxo-dGTP, purine deoxyribose triphosphate, 2-aminopurine deoxyribose triphosphate and 2,6-diaminopurine deoxyribose triphosphate.
Form	Tris-based buffer,50% glycerol
Molecular Mass	41.0 kDa

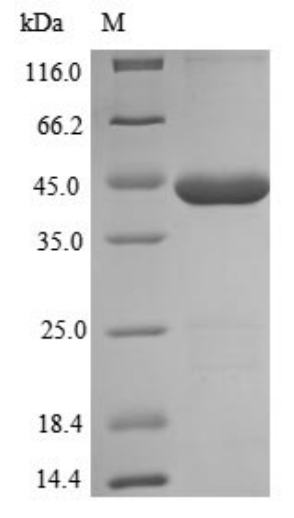
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AA Sequence	MQKVVLATGNVGKVRELASLLSDFGLDIVAQTDLGVDSAEETGLTFIENAILKARHAA KVTALPAIADDSGLAVDVLGGAPGIYSARYSGEDATDQKNLQKLLETMKDVPDDQR QARFHCVLVYLRHAEDPTPLVCHGSWPGVITREPAGTGGFGYDPIFFVPSEGKTAA ELTREEKSAISHRGQALKLLLDALRNG
Purity	> 85% as determined by SDS-PAGE.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4 centigrade for up to one week.
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 centigrade/-80 centigrade. The shelf life of lyophilized form is 12 months at -20 centigrade/-80 centigrade.
Concentration	A hardcopy of COA will be sent along with the products. Please refer to it for detailed information.

GENE INFORMATION

Gene Name	rdgB dITP/XTP pyrophosphatase [Escherichia coli str. K-12 substr. MG1655]
Official Symbol	RDGB
Synonyms	rdgB; ECK2949; yggV;
Gene ID	947429
Protein Refseq	NP_417429
UniProt ID	P52061

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

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