

## Recombinant Human XDH protein, His/GST-tagged

Cat. No. XDH-17H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human XDH(Met1~Gly300) fused with His/GST tag at N-terminal was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	1-300 a.a.
<b>Description</b>	Xanthine dehydrogenase belongs to the group of molybdenum-containing hydroxylases involved in the oxidative metabolism of purines. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Xanthine dehydrogenase can be converted to xanthine oxidase by reversible sulfhydryl oxidation or by irreversible proteolytic modification. Defects in xanthine dehydrogenase cause xanthinuria, may contribute to adult respiratory stress syndrome, and may potentiate influenza infection through an oxygen metabolite-dependent mechanism.
<b>Form</b>	Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.
<b>Molecular Mass</b>	63.1kDa
<b>AA Sequence</b>	MTADKLVFFV NGRKVVEKNA DPETLLAYL RRLGLSGTK LGCGEGGCGA CTVMLSKYDR LQNKIVHFSA NACLAPICSL HHVAVTTVEG IGSTKTRLHP VQERIAKSHG SQCGFCTPGI VMSMYLLRN QPEPTMEEIE NAFQGNLCRC

 Tel: 1-631-559-9269 1-516-512-3133

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

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

TGYRPILQGF RTFARDGGCC GGDGNNPNCC MNQKKDHSVS LSPSLFKPEE  
 FTPLDPTQEP IFPELLRLK DTPRKQLRFE GERVTWIQAS TLKELLDLKA  
 QHPDAKLVVG NTEIGIEMKF KNMLFPMIVC PAWIPELNSV EHGPDGISFG

**Endotoxin** <1.0EU per 1g (determined by the LAL method)

**Purity** > 90%

**Applications** SDS-PAGE; WB; ELISA; IP.

**Storage** Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.

**Reconstitution** Reconstitute in sterile PBS, pH7.2-pH7.4.

## GENE INFORMATION

**Gene Name** [XDH xanthine dehydrogenase \[ Homo sapiens \]](#)

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

**Synonyms** XDH; xanthine dehydrogenase; xanthene dehydrogenase; xanthine dehydrogenase/oxidase; XO; XOR; xanthine oxidase; xanthine oxidoreductase;

**Gene ID** [7498](#)

**mRNA Refseq** [NM\\_000379](#)

**Protein Refseq** [NP\\_000370](#)

**MIM** [607633](#)

 Tel: 1-631-559-9269 1-516-512-3133

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

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

<b>UniProt ID</b>	P47989
<b>Chromosome Location</b>	2p23.1
<b>Pathway</b>	Caffeine metabolism, organism-specific biosystem; Caffeine metabolism, conserved biosystem; Drug metabolism - other enzymes, organism-specific biosystem; Drug metabolism - other enzymes, conserved biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of nucleotides, organism-specific biosystem;
<b>Function</b>	2 iron, 2 sulfur cluster binding; UDP-N-acetylmuramate dehydrogenase activity; electron carrier activity; flavin adenine dinucleotide binding; iron ion binding; metal ion binding; molybdopterin cofactor binding; oxidoreductase activity, acting on CH-OH group of donors; protein homodimerization activity; xanthine dehydrogenase activity; xanthine oxidase activity; xanthine oxidase activity;

 Tel: 1-631-559-9269 1-516-512-3133

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

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