

## DUT 抗原（重组蛋白）

中文名称：DUT 抗原（重组蛋白）

英文名称：DUT Antigen (Recombinant Protein)

别名：dUTPase

储存：冷冻（-20℃）

相关类别：抗原

概述：

Fusion protein corresponding to a region derived from 1-164 amino acids of human DUT

技术规格：

<b>Full name:</b>	deoxyuridine triphosphatase
<b>Synonyms:</b>	dUTPase
<b>Swissprot:</b>	P33316
<b>Gene Accession:</b>	BC033645
<b>Purity:</b>	>85%, as determined by Coomassie blue stained SDS-PAGE
<b>Expression system:</b>	Escherichia coli
<b>Tags:</b>	His tag C-Terminus, GST tag N-Terminus
<b>Background:</b>	This gene encodes an essential enzyme of nucleotide metabolism. The encoded protein forms a ubiquitous, homotetrameric enzyme that hydrolyzes dUTP to dUMP and pyrophosphate. This reaction serves two cellular purposes: providing a precursor (dUMP) for the synthesis of thymine nucleotides needed for DNA replication, and limiting intracellular pools of dUTP. Elevated levels of dUTP lead to increased incorporation of uracil into DNA, which induces extensive excision repair mediated by uracil glycosylase. This repair process, resulting in the removal and reincorporation of dUTP, is self-defeating and leads to DNA fragmentation and cell death. Alterna

tive splicing of this gene leads to different isoforms that localize to either the mitochondrion or nucleus. A related pseudogene is located on chromosome 19.