Creative Enzymes®

Native Rat Glutathione-S-Transferase

Cat. No. NATE-0327

Lot. No. (See product label)

Introduction

Description	Glutathione S-transferases (GSTs), previously known as ligandins, comprise a family of eukaryotic and prokaryotic phase II metabolic isozymes best known for their ability to catalyze the conjugation of the reduced form of glutathione (GSH) to xenobiotic substrates for the purpose of detoxification. The GST family consists of three superfamilies:the cytosolic, mitochondrial, and microsomal—also known as MAPEG—proteins. Members of the GST superfamily are extremely diverse in amino acid sequence, and a large fraction of the sequences deposited in public databases are of unknown function. The Enzyme Function Initiative (EFI) is using GSTs as a model superfamily to identify new GST functions.
Synonyms	Glutathione S-transferases; GSTs; GST; Glutathione S-alkenetransferase; Glutathione S-alkyltransferase; Glutathione S-aralkyltransferase; Glutathione S-aryltransferase; Glutathione S-epoxidetransferase; RX:Glutathione R-transferase; EC 2.5.1.18; 50812-37-8

Product Information

Species	Rat
Source	Rat Liver
Form	Lyophilized
EC Number	EC 2.5.1.18
CAS No.	50812-37-8
Purity	Purified
Activity	> 10 U/mg
Contaminants	ALP, gGT, GPT/ALT, GOT/AST, SDH:
Pathway	Drug metabolism-cytochrome P450, organism-specific biosystem; Drug metabolism-cytochrome P450, conserved biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, conserved biosystem; Metabolism of xenobiotics by cytochrome P450, organism-specific biosystem; Metabolism of xenobiotics by cytochrome P450, conserved biosystem
Function	drug binding; glutathione binding; glutathione transferase activity; glutathione transferase activity; transferase activity
Unit Definition	One unit will catalyze the transfer of one micromole of glutathione to 1-chloro-2,4-dinitrobenzene per minute at 37°C and pH 6.5.

Storage and Shipping Information

Storage	-20°C