
Product Data Sheet

Product Name: GSTM1 Mouse, His
 Cat. No.: GP21745
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	GST1; GTH4; GTM1; GSTM1-1; MGC26563; GSTM1a-1a; GSTM1b-1b; GSTM1; Glutathione S-transferase Mu 1; GST class-mu 1; Glutathione S-transferase GT8.7; pmGT10; GST 1-1.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MPMILGYWNV RGLTHPIRML LEYTDSSYDE KRYTMGDAPD FDRSQWLNEK FKLGLDFPNL PYLIDGSHKI TQSNAILRYL ARKHHLDGET EEERIRADIV ENQVMDTRMQ LIMLCYNPDF EKQKPEFLKT IPEKMKLYSE FLGKRPWFAG DKVTYVDFLA YDILDQYRMF EPKCLDAFPN LRDFLARFEG LKKISAYMKS SRYIATPIFS KMAHWSNK.		
Formulation	The GSTM1 solution contains 20 mM Tris-HCl buffer (pH8.0), 1mM DTT and 10% glycerol		

Introduction

Cytosolic and membrane-bound types of GST are encoded by 2 different supergene families. There are 8 classes of the soluble cytoplasmic mammalian GST: alpha, kappa, mu, omega, pi, sigma, theta and zeta. The mu class of enzymes functions in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with glutathione. The genes encoding the mu class of enzymes are arranged in a gene cluster on chromosome 1p13.3 and are highly polymorphic. These genetic differences can change an individual's resistance to carcinogens and toxins as well as affect the toxicity and efficacy of certain drugs. Null mutations of this class mu gene have been linked with the rise in a number of cancers.

Biological Activity

Specific activity is < 11 units/mg, and is defined as the amount of enzyme that

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conjugate 1.0 u mole of 1-chloro-2,4-dinitrobenzene (CDNB) with reduced glutathione per minute at pH 6.5 at 25C.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

GSTM1 Mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 238 amino acids (1-218 a.a.) and having a molecular mass of 28.1kDa. The GTM1 is fused to a 20 amino acid His-Tag at N-Terminus and purified by proprietary chromatographic techniques.

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