

## 32-6784: GSTA1 Mouse

**Application :** Functional Assay

**Alternative Name :** Glutathione S-transferase A1, GST class-alpha member 1, Glutathione S-transferase Ya , Glutathione S-transferase Ya1.

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

Membrane-bound & Cytosolic forms of GST are encoded by 2 separate supergene families. These enzymes function in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with glutathione. There are 8 different classes of soluble cytoplasmic mammalian GST: alpha, kappa, mu, omega, pi, sigma, theta and zeta. The GSTA1 is found in a cluster mapped to chromosome 6, and is highly expressed in the liver. GSTA1 protects the cells from reactive oxygen species.

GSTA1 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 246 amino acids (1-223 a.a) and having a molecular mass of 28kDa. GSTA1 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 5 µg / 20 µg

**Purification :** Greater than 95.0% as determined by SDS-PAGE.

**Content :** GSTA1 protein solution (1mg/ml) containing Phosphate buffered saline (pH7.4), 10% glycerol and 1mM DTT.

**Storage condition :** 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.

**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MGSMAGKPV LHYFNARGRME CIRWLLAAAG VEFEEKFIQS  
PEDLEKLLKD GNLMFDQVPM VEIDGMKLAQ TRAILNYIAT KYDLYGKDMK ERALIDMYSE GILDLEMIG  
QLVLCPPDQR EAKTALAKDR TKNRYLP AFE KVLKSHGQDY LVGNRLTRVD IHLLEVLLYV EEFDASLLTP  
FPLLKAFKSR ISSLPNVKKF LQPGSQRKPP MDAKQIQEAR KAFKIQ.

### Application Note

The specific activity is defined as the amount of enzyme that conjugate 1.0 pmole of 1-chloro-2,4-dinitrobenzene (CDNB) with reduced glutathione per minute at pH 6.5 at 25C and is > 4,000 pmol/min/ug.