

## Human Recombinant GSTM 2

<b>CATALOG #:</b>	6350-100	100 µg
<b>ALTERNATE NAMES:</b>	Glutathione S-transferase Mu 2, GST4, GSTM, GSTM2-2, GTHMUS.	
<b>SOURCE:</b>	E.Coli	
<b>PURITY:</b>	> 95% by SDS - PAGE	
<b>MOL. WEIGHT:</b>	27.9 kDa (238 aa, 1-218 aa + NT His Tag)	
<b>FORMULATION:</b>	0.5 mg/ml solution in 20 mM Tris HCl (pH 8.0) containing 10% glycerol, 0.1 M NaCl and 1 mM DTT.	

### STORAGE CONDITIONS:

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

### DESCRIPTION:

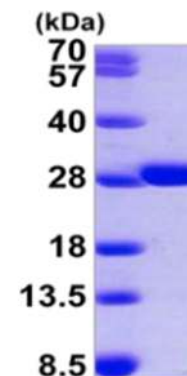
Glutathione S-transferase Mu 2 (GSTM2) belongs to the Glutathione S-Transferase (GST) family of proteins. There are 8 families of GST proteins: alpha, kappa, mu, omega, pi, sigma, theta and zeta, each of which is composed of proteins that have various functions throughout the cell. The mu class of enzymes 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 structured in a gene cluster on chromosome 1p13.3 and are proven to be highly polymorphic. These genetic variants can change an individual's susceptibility to carcinogens and toxins as well as have an effect on the toxicity and efficacy of several drugs.

### AMINO ACID SEQUENCE:

MGSSHHHHHH SSGLVPRGSH MPMTLG YWNI RGLAHSIRLL LEYTDSSYEE  
KKYTMGDAPD YDRSQWLNEK FKLGLDFPNL PYLIDGTHKI TQSNAILRYI ARKHNLGEGS  
EKEQIREIDIL ENQFMDSRMQ LAKLCYDPDF EKLKPEYLQA LPEMLKLYSQ FLGKQPWFLLG  
DKITFVDFIA YDVLERNQVF EPSCLDAFPN LKDFISRFEG LEKISAYMKS SRFLPRPVFT  
KMAVWGNK

### BIOLOGICAL ACTIVITY:

Specific activity is < 25 units/mg, and is defined as the amount of enzyme that conjugates 1.0 µ mole of 1-chloro-2, 4-dinitrobenzene (CDNB) with reduced glutathione per minute at pH 6.5 at 25°C.



15% SDS-PAGE (3µg)

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### RELATED PRODUCTS:

- GST Colorimetric Activity Assay Kit (Cat. No. K263-100)
- GST Fluorometric Activity Assay Kit (Cat. No. K260-100)
- GST Inhibitor-1 (Cibacron Blue 3G-A, Sodium Salt) (Cat. No. 1555R-1000)
- GST Inhibitor-2 (Ethacrynic acid) (Cat. No. 1556-1000)
- Human recombinant GSTA1 (Cat. No. 6346-100)
- Human recombinant GSTP1 (Cat. No. 6347-100)
- Mouse recombinant GSTMu1 (Cat. No. 6348-100)
- Mouse recombinant GSTM1 (Cat. No. 6349-100)
- Schistosoma japonicum recombinant GST (Cat. No. 6351-100)
- Human recombinant GSR (Cat. No. 6352-100)

**FOR RESEARCH USE ONLY! Not to be used in humans.**