

GSTP1, human recombinant

CATALOG #:	6347-100	100 µg
ALTERNATE NAMES:	Glutathione S-transferase P, DFN7, FAEES3, GST3, PI	
SOURCE:	E.Coli	
PURITY:	> 95% by SDS – PAGE	
SPECIFIC ACTIVITY:	20 U/mg	
MOL. WEIGHT:	27.6 kDa (230 aa, 1-210 aa + His Tag)	
ENDOTOXIN LEVEL:	< 1.0 EU per 1 µg of protein (determined by LAL method).	
FORMULATION:	In 30% glycerol without additives.	

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 P is an enzyme that in humans is encoded by the GSTP1 gene. Glutathione S-transferases (GSTs) are a family of enzymes that play an important role in detoxification by catalyzing the conjugation of many hydrophobic and electrophilic compounds with reduced glutathione. Based on their biochemical, immunologic, and structural properties, the soluble GSTs are categorized into 4 main classes: alpha, mu, pi, and theta. The glutathione S-transferase pi gene (GSTP1) is a polymorphic gene encoding active, functionally different GSTP1 variant proteins that are thought to function in xenobiotic metabolism and play a role in susceptibility to cancer, and other diseases.

AMINO ACID SEQUENCE:

MGSSHHHHHSSGLVPRGSHMPPTYVVYFPVGRCAALRMLLADQQQSWKEEVTVETW
QEGSLKASCLYGQLPKFQDGLTLYQSNTILRHLGRTLGLYGKDDQEAALVDMVNDGVEDL
RCKYISLIYTNYEAGKDDYVKALPGQLKPFETLLSQNQQGKTFIVGDQISFADYNLLDLLLIIHEV
LAPGCLDAFPLLSAYVGRLSARPKLKAFLASPEYVNLPIGNGKQ

BIOLOGICAL ACTIVITY:

Activity is determined with BioVision's GST colorimetric activity assay kit, Cat # K263-100. One unit of the human recombinant GSTP1 is defined as the amount of enzyme that conjugates 1.0 µmole of 1-chloro-2, 4-dinitrobenzene (CDNB) with reduced glutathione per minute at pH 6.5 at 25°C.



SDS-PAGE (12%) of Human GSTP1:

1: Protein Marker
2: 5 µg Human recombinant GSTP1

SDS-PAGE (12%) of Human GSTP1: 5 µg of Recombinant human GSTP1 loaded under reducing conditions and stained with Coomassie Blue. Recombinant human GSTP1 has a predicted MW of ~ 27.6 kDa.

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**)
- Mouse recombinant GSTMu 1 (**Cat. No. 6348-100**)
- Mouse recombinant GSTM1 (**Cat. No. 6349-100**)
- Human recombinant GSTM2 (**Cat. No. 6350-100**)
- 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.