

Glutathione S-Transferase pi 1 Active Protein | GSTP1 active protein

Recombinant Human Glutathione S-Transferase pi 1

CATALOG # AAA38686	HOST E Coli
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PRODUCT SYNONYMS

Glutathione S-Transferase pi 1; Recombinant Human Glutathione S-Transferase pi 1; GSTP1 Human; Glutathione S-Transferase pi 1 Human Recombinant; Glutathione S-transferase P; GST class-pi; GSTP1-1; GSTP1; FAEES3; GST3; PI; DFN7; GSTP1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95.0% as determined by SDS-PAGE.
Form/Format	The GSTP1 solution contains 20mM Tris-HCl buffer (pH7.0), 30% glycerol, 1mM EDTA and 0.1mM PMSF. Sterile Filtered colorless solution.
Concentration	20ug/40ul (varies by lot)
Sequence	MRGSHHH HHHGMASMTG GQQMGRDLYD DDD KDRWGSHPPTYTVVYF PVRGRCAALR MLLADQGQSW KEEVTVETW QEGSLKASCL YGQLPKFQDG DLTLYQSNTI LRHLGRTLGL YGKDQQEAAL VDMVNDGVED LRCKYISLIY TNYEAGKDDY VKALPGQLKP FETLLSQNQG GKTFFIVGDQI SFADYNLLDL LLIHEVLAPG CLDAFPLLSA YVGRLSARPK LKAFLASPEY VNLPIGNGK Q
Sequence Length	210
Biological Activity	Specific activity is < 6.5 units/mg, and is defined as the amount of enzyme that conjugate 1.0 u mole of 1-chloro-2,4-dinitrobenzene (CDNB) with reduced glutathione per minute at pH 6.5 at 25C.

ADDITIONAL INFORMATION

Related Product Information for GSTP1 active protein	Description: GSTP1 Human Recombinant fused with 37 amino acid His tag at N-terminus produced in E Coli is a single, non-glycosylated, polypeptide chain containing 247 amino acids (1-210 a.a.) and having a molecular mass of 27.6kDa. The GSTP1 is purified by proprietary chromatographic techniques. Introduction: GSTP1 is a polymorphic gene encoding active, functionally different GSTP1 variant proteins that are believed to function in xenobiotic metabolism and have a part in susceptibility to cancer, and other diseases. GSTP1 is a glutathione S-transferase belonging to the pi class. GST family enzymes play a significant role in detoxification by catalyzing the conjugation of many hydrophobic and electrophilic compounds with reduced glutathione. Based upon the biochemical, immunologic and structural properties of the soluble GSTs they are grouped into 4 main classes: alpha, mu, pi, and theta. The GSTP1 enzyme acts by catalyzing the reaction of glutathione with an acceptor molecule to form a Sulfur-substituted glutathione. The reactions employing glutathione contribute the transformation of a broad range of electrophiles, including reactive products of lipid, protein, carcinogens, therapeutic drugs, environmental toxins, and products of oxidative stress. The GSTP1 inactivation through CpG hypermethylation is frequent in pituitary adenomas and may be a factor in aggressive pituitary tumor behavior. GSTP1 is may be a transcriptional target of the p53 tumor suppressor gene. Single-nucleotide polymorphism in GSTP1 is linked to modified protein binding, which influence GSTP1's contribution to carcinogen and drug metabolism, and possibly disease pathogenesis and/or drug response. GST-pi might have central roles in proliferation of androgen-independent human prostate cancer cells.
Product Categories/Family for GSTP1 active protein	Enzymes; Transferase

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504183
NCBI GeneID	2950
NCBI Accession #	NP_000843.1
NCBI GenBank Nucleotide #	NM_000852.3
UniProt Accession #	P09211; O00460; Q15690; Q5TZY3
Molecular Weight	23,356 Da
NCBI Official Full Name	glutathione S-transferase P
NCBI Official Synonym Full Names	glutathione S-transferase pi 1
NCBI Official Symbol	GSTP1
NCBI Official Synonym Symbols	PI; DFN7; GST3; GSTP; FAEES3; HEL-S-22
NCBI Protein Information	glutathione S-transferase P; GST class-pi; GSTP1-1; deafness, X-linked 7; epididymis secretory protein Li 22; fatty acid ethyl ester synthase III
UniProt Protein Name	Glutathione S-transferase P
UniProt Gene Name	GSTP1
UniProt Synonym Gene Names	FAEES3; GST3
UniProt Entry Name	GSTP1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-gstp1-active-protein/glutathione-s-transferase-pi-1/38686>