



# Recombinant Human Glutathione S-transferase A3 (GSTA3)

<b>Product Code</b>	CSB-EP618095HU
<b>Abbreviation</b>	GSTA3
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q16772
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	AGKPKLHYF NGRGRMEPIR WLLAAAGVEF EEKFIGSAED LGKLRNDGSL MFQQVPMVEI DGMKLVQTRA ILNYIASKYN LYGKDIKERA LIDMYTEGMA DLNEMILLLP LCRPEEKDAK IALIKEKTKS RYFPAFEKVL QSHGQDYLVG NKLSRADISL VELLYYVEEL DSSLISNFPL LKALKTRISN LPTVKKFLQP GSPRKPPADA KALEEARKIF RF
<b>Source</b>	E.coli
<b>Target Names</b>	GSTA3
<b>Protein Names</b>	Recommended name: Glutathione S-transferase A3 EC= 2.5.1.18 Alternative name(s): GST class-alpha member 3 Glutathione S-transferase A3-3
<b>Expression Region</b>	2-222
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. These enzymes are involved in cellular defense against toxic, carcinogenic, and pharmacologically active electrophilic compounds. At present, eight distinct classes of the soluble cytoplasmic mammalian glutathione S-transferases have been identified: alpha, kappa, mu, omega, pi, sigma, theta and zeta. This gene encodes a glutathione S-transferase belonging to the alpha class genes that are located in a cluster mapped to chromosome 6. Genes of the alpha class are highly related and encode enzymes with glutathione peroxidase activity. However, during evolution, this alpha class gene diverged accumulating mutations in the active site that resulted in differences in substrate specificity and catalytic activity. The enzyme encoded by this gene catalyzes the double bond isomerization of precursors for progesterone and testosterone during the biosynthesis of steroid hormones. An



additional transcript variant has been identified, but its full length sequence has not been determined.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

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