Recombinant Rat Glutathione S-transferase alpha-3 (Gsta3)

Product Code	CSB-EP009972RA
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P04904
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	PGKPVLHYF DGRGRMEPIR WLLAAAGVEF EEQFLKTRDD LARLRNDGSL MFQQVPMVEI DGMKLVQTRA ILNYIATKYN LYGKDMKERA LIDMYAEGVA DLDEIVLHYP YIPPGEKEAS LAKIKDKARN RYFPAFEKVL KSHGQDYLVG NRLSRADVYL VQVLYHVEEL DPSALANFPL LKALRTRVSN LPTVKKFLQP GSQRKPLEDE KCVESAVKIF S
Source	E.coli
Target Names	Gsta3
Protein Names	Recommended name: Glutathione S-transferase alpha-3 EC= 2.5.1.18 Alternative name(s): GST 2-2 GST A3-3 GST AA Glutathione S-transferase Yc-1 Short name= GST Yc1
Expression Region	2-221
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	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-tranferase 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.
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.
Shelf Life	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.