

Recombinant Schistosoma Japonicum GST 26 Protein

Catalog Number: PKSQ050086

Note: Centrifuge before opening to ensure complete recovery of vial contents.

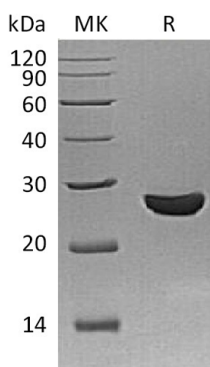
Description

Species	Schistosoma Japonicum
Source	E.coli-derived Schistosoma Japonicum GST 26 protein Met1-Lys218
Calculated MW	25.7 kDa
Observed MW	28 kDa
Accession	P08515
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Glutathione S-transferases (GSTs), previously known as ligandins, comprise a family of eukaryotic and prokaryotic phase II metabolic isozymes best known for their ability to catalyze the conjugation of the reduced form of glutathione (GSH) to xenobiotic substrates for the purpose of detoxification. The GST family consists of three superfamilies: the cytosolic, mitochondrial, and microsomal (MAPEG) proteins. GST isoenzymes appear to play a central role in the parasite detoxification system. Other functions are also suspected including a role in increasing the solubility of haematin in the parasite gut. The activity of GSTs is dependent upon a steady supply of GSH from the synthetic enzymes gamma-glutamylcysteine synthetase and glutathione synthetase, as well as the action of specific transporters to remove conjugates of GSH from the cell. The primary role of GSTs is to detoxify xenobiotics by catalyzing the nucleophilic attack by GSH on electrophilic carbon, sulfur, or nitrogen atoms of said nonpolar xenobiotic substrates, thereby preventing their interaction with crucial cellular proteins and nucleic acids.