

Active Recombinant Schistosoma japonicum GST, His-tagged

Cat. No. GST-112S **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Schistosoma japonicum GST full length protein contains 244 amino acids(1-224 a.a.) expressed in E.coli, having a molecular mass of 28.3kDa. The GST protein is fused to 20 amino acid His-Tag at N-terminus. The GST protein is purified by proprietary chromatographic techniques.
Species	Schistosoma japonicum
Source	E.coli
ProteinLength	1-224 a.a.
Description	Antioxidant enzyme Glutathione S- Transferase (GST) is thought to do the primary cellular defense mechanism against reactive oxygen species. GST reduces lipid hydroperoxides through its Se-independent glutathione peroxidase activity. The enzyme also detoxifies lipid peroxidation end products such as 4-hydroxynonenal (4-HNE). The soluble GST is a 26 kDa protein which occurs as a dimer in all aerobic organisms. Each monomer has two domains, one that binds GSH and is an α -structure similar to thioredoxin and the other, all helical, that binds the hydrophobic substrate. The GST -fusion protein expression system is a widely used recombinant protein expression system that allows a peptide or a regulatory protein domain to be expressed as a fusion to the C-terminus of Schistosoma japonicum GST. Fusion proteins also possess GST -enzymatic activity and can undergo dimerization similar to in vivo. The fusion protein can be purified via GST -affinity column chromatography. In most cases, the desired peptides or domains are removed from

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GST by applying a specific protease that recognizes and cleaves the linker between the protein domain and GST. The technique has been widely used to generate different kinds of proteins for crystallization, molecular immunology studies, the production of vaccines and studies involving protein-protein and protein-DNA interactions.

Form	Sterile Filtered clear solution. GST is supplied in PBS pH 7.4 & 10% glycerol.
Bio-activity	2.8-3.3 units/mg, & 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.
Molecular Mass	28.3 kDa
AA Sequence	MGSSHHHHHH SSGLVPRGSH MSPILGYWKI KGLVQPTRL L LEYLEEKYEE HLYERDEGDK WRNKKFELGL EFPNLPYYID GDVKLTQSM AIIRYIADKHN MLGGCPKERA EISMLEGAVL DIRYGVSR I A YSKDFETLKV DFLSKLPEML KMFEDRLCHK TYLNGDHVTH PDFMLYDALDVVLYMDPMCL DAFPKLVCFK KRIEAI PQID KYLKSSKYIA WPLQGWQATF GGGDHPPKSD LVPR.
Purity	Greater than 95% as determined by SDS-PAGE.
Stability	Store vial at -20°C to -80°C. When stored at the recommended temperature, this protein is stable for 12 months. Please prevent freeze-thaw cycles.
Full Length	Full L.