

GST

Description: Recombinant Glutathione S-Transferase full length protein (1-224a.a.) expressed in E.coli, having a molecular mass of 26kDa. GST was isolated from an E. coli strain that carries the coding sequence for Schistosoma japonicum GST under the control of a T7 promoter. The GST is purified by proprietary chromatographic techniques.

Synonyms: Glutathione S-Transferase, GST, Glutathione S-transferase class-mu 28 kDa isozyme, GST 28, EC 2.5.1.18, Sj28GST, Sj28 antigen.

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered clear solution.

Amino Acid Sequence: MSPILGYWKI KGLVQPTRLL LEYLEEKYEE HLYERDEGDK
WRNKKFELGL EFPNLPYYID GDVKLTQSMA IIRYIADKHN MLGGCPKERA EISMLEGAVL
DIRYGVSRIA YSKDFETLKV DFLSKLPEML KMFEDRLCHK TYLNGDHVTH PDFMLYDALD
VVLYMDPMCL DAFPKLVCFK KRIEAIQID KYLKSSKYIA WPLQGWQATF GGGDHPPKSD
LVPR.

Purity: Greater than 95% as determined by SDS-PAGE.

Formulation:

GST supplied in Phosphate Buffered Saline pH 7.4.

Stability:

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

Applications:

GST can be used for protein-protein interactions assay and protein-DNA interactions assay.

Introduction:

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 GST by applying a specific protease that recognizes and cleaves the linker

www.neobiolab.com

info@neobiolab.com

888.754.5670, +1 617.500.7103 United States

0800.088.5164, +44 020.8123.1558 United Kingdom

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.



Catalog #:ENPS-400

Biological Activity:

0.5-2.5 units/mg (please enquire for specific batch value). A unit 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.

For research use only.

To place an order, please Click [HERE](#).

© 2015 NeoScientific



neobiolab | Term | Quote/Order | Services | Products | Support | Corporate | Contact Us

Copyrights @ 2013 NEO Group 245 First Street, 18th Floor, Cambridge MA 02142 888.754.5670 (toll-free)



Request a
CATALOG
[CLICK HERE](#)