

Synonym

CD224, D22S672, D22S732, GGT, GGT 1, GGTD, GTG

Source

Human GGT1 Protein, His Tag(GG1-H5243) is expressed from human 293 cells (HEK293). It contains AA Pro 27 - Tyr 569 (Accession # P19440).

Predicted N-terminus: His

Molecular Characterization

Poly-his

GGT1(Pro 27 - Tyr 569) P19440

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 60.5 kDa. The protein migrates as 23-25 kDa and 50-65 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μ m filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

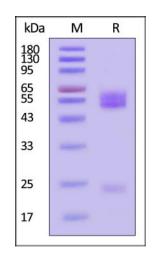
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

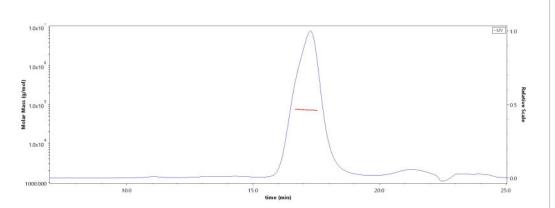


Human GGT1 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity

Measured by its ability to hydrolyze glutathione to Glu and Cys-Gly. The specific activity is >1300 pmol/min/μg (QC tested).

SEC-MALS



The purity of Human GGT1 Protein, His Tag (Cat. No. GG1-H5243) is more than 90% and the molecular weight of this protein is around 55-80 kDa verified by SEC-MALS.

<u>Repor</u>



Human GGT1 Protein, His Tag (active enzyme, MALS verified)

Catalog # GG1-H5243



Background

The enzyme encoded by this gene is a type I gamma-glutamyltransferase that catalyzes the transfer of the glutamyl moiety of glutathione to a variety of amino acids and dipeptide acceptors. The enzyme is composed of a heavy chain and a light chain, which are derived from a single precursor protein. It is expressed in tissues involved in absorption and secretion and may contribute to the etiology of diabetes and other metabolic disorders. Multiple alternatively spliced variants have been identified. There are a number of related genes present on chromosomes 20 and 22, and putative pseudogenes for this gene on chromosomes 2, 13, and 22. [provided by RefSeq, Jan 2014]

Clinical and Translational Updates

