

MGST3 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP7855a

Specification

MGST3 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>014880</u>

MGST3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 4259

Other Names Microsomal glutathione S-transferase 3, Microsomal GST-3, Microsomal GST-III, MGST3

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP7855a was selected from the N-term region of human MGST3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MGST3 Antibody (N-term) Blocking Peptide - Protein Information

Name MGST3 (<u>HGNC:7064</u>)

Function

Displays both glutathione S-transferase and glutathione peroxidase activities toward oxyeicosanoids, as part of cellular detoxification as well as synthesis of bioactive metabolites (PubMed:9278457, PubMed:36370807). Catalyzes conjugate addition of reduced glutathione to the alpha, beta-unsaturated C=C carbonyl group of eisosanoids such as leukotriene A4 and 15-deoxy-Delta12,14- prostaglandin J2 to form GSH adducts relevant to the inflammatory response (PubMed:9278457, PubMed:36370807). Catalyzes glutathione- dependent reduction of eicosanoid peroxides to yield the corresponding eicosanoid hydroxides (PubMed:9278457" target=" blank">9278457).



Cellular Location

Mitochondrion outer membrane; Multi-pass membrane protein

Tissue Location

Predominantly expressed in heart, skeletal muscle, and adrenal cortex. Also found in brain, placenta, liver, kidney, pancreas, thyroid, testis and ovary. Almost absent in lung, thymus and peripheral blood leukocytes. Expressed in mast cells

MGST3 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

MGST3 Antibody (N-term) Blocking Peptide - Images

MGST3 Antibody (N-term) Blocking Peptide - Background

The MAPEG (Membrane Associated Proteins in Eicosanoid and Glutathione metabolism) family consists of six human proteins, several of which are involved the production of leukotrienes and prostaglandin E, important mediators of inflammation. MGST3 is an enzyme which catalyzes the conjugation of leukotriene A4 and reduced glutathione to produce leukotriene C4. This enzyme also demonstrates glutathione-dependent peroxidase activity towards lipid hydroperoxides.

MGST3 Antibody (N-term) Blocking Peptide - References

Thameem, F., Hum. Genet. 113 (4), 353-358 (2003) Jakobsson, P.J., Am. J. Respir. Crit. Care Med. 161 (2 PT 2), S20-S24 (2000)