TGM2 Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	TGM2, Blocking Peptide
Full Product Name	TGM2 Blocking Peptide
Product Gene Name	TGM2 blocking peptide
Product Synonym Names	ALPHA SUBUNIT; C polypeptide; EC 2.3.2.13; epididymis secretory protein Li 45; G alpha h; G[a]h; Gh CLASS G ALPHA h; GNAH; GNAH G PROTEIN; H POLYPEPTIDE; HEL-S-45; Protein glutamine gamma glutamyltransferase 2; Protein-glutamine gamma-glutamyltransferase 2; TG 2; TG(C); TG2; TGase C; TGase H; TGase-2; TgaseII; TGC; TGC GUANINE NUCLEOTIDE BINDING PROTEIN; TGM2; TGM2_HUMAN; Tissue transglutaminase; Transglutaminase 2; Transglutaminase 2 C polypeptide; Transglutaminase C; Transglutaminase H; Transglutaminase-2; tTG; tTGas
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	TGM2 peptide (MBS9614962) is used for blocking the activity of TGM2 antibody (MBS9600409)
Molecular Weight	77329 MW
OMIM	190196
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for TGM2 blocking peptide	Blocking/Control
Related Product Information for TGM2 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of TGM2 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for TGM2 purchase	MBS9614962 is a blocking peptide targeting TGM2.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for TGM2. It may not necessarily be applicable to this product.

NCBI GI #	1020158911
NCBI GeneID	7052
NCBI Accession #	NP_001310245.1

UniProt Primary Accession #	P21980
UniProt Secondary Accession #	Q16436; Q6B838; Q9BTN7; Q9H035; Q9UH35; E1P5V9
UniProt Related Accession #	P21980
GenBank Nucleotide #	NM_001323316.1
NCBI Official Full Name	protein-glutamine gamma-glutamyltransferase 2 isoform a
NCBI Official Synonym Full Names	transglutaminase 2
NCBI Official Symbol	TGM2
NCBI Official Synonym Symbols	TGC; TG(C)
UniProt Protein Name	Protein-glutamine gamma-glutamyltransferase 2
UniProt Synonym Protein Names	Tissue transglutaminase; Transglutaminase C; TG(C); TGC; TGase C; Transglutaminase H; TGase H; Transglutaminase-2
Protein Family	Protein-glutamine gamma-glutamyltransferase
UniProt Gene Name	TGM2
UniProt Synonym Gene Names	TG(C); TGC; TGase C; TGase H; TGase-2
UniProt Entry Name	TGM2_HUMAN
NCBI Protein Information	protein-glutamine gamma-glutamyltransferase 2
NCBI Summary for TGM2	Transglutaminases are enzymes that catalyze the crosslinking of proteins by epsilon-gamma glutamyl lysine isopeptide bonds. While the primary structure of transglutaminases is not conserved, they all have the same amino acid sequence at their active sites and their activity is calcium-dependent. The protein encoded by this gene acts as a monomer, is induced by retinoic acid, and appears to be involved in apoptosis. Finally, the encoded protein is the autoantigen implicated in celiac disease. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
UniProt Comments for TGM2	TGM2: an enzyme of the transglutaminase family that catalyzes the crosslinking of proteins and the conjugation of polyamines to proteins. While the primary structure of transglutaminases is not conserved, they all have the same amino acid sequence at their active sites and their activity is calcium-dependent. The protein encoded by this gene acts as a monomer, is induced by retinoic acid, and appears to be involved in apoptosis. . Is the autoantigen in coeliac disease and plays a role in apoptosis, cellular differentiation and matrix stabilisation. Three alternatively spliced isoforms have been described. Protein type: Transferase; EC 2.3.2.13 Chromosomal Location of Human Ortholog: 20q12 Cellular Component: focal adhesion; mitochondrion; plasma membrane; cytosol Molecular Function: protein domain specific binding; protein binding; GTP binding; protein-glutamine gamma-glutamyltransferase activity; metal ion binding Biological Process: elevation of cytosolic calcium ion concentration during G-protein signaling, coupled to IP3 second messenger (phospholipase C activating); positive regulation of I-kappaB kinase/NF-kappaB cascade; positive regulation of cell adhesion; isopeptide cross-linking via N6-(L-isoglutamyl)-L-lysine; positive regulation of apoptosis; reduction of endoplasmic reticulum calcium ion concentration; positive regulation of smooth muscle cell proliferation; blood vessel remodeling; protein homooligomerization; apoptotic cell clearance; elevation of mitochondrial calcium ion concentration; positive regulation of inflammatory response
Research Articles on TGM2	**1.** Circulating tissue transglutaminase is associated with sFlt-1, soluble endoglin and VEGF in the maternal circulation of preeclampsia patients, suggesting that tTG may have a role in the pathogenesis of PE.

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