Active Recombinant Human TGM2 Protein, His tagged

Cat. No. TGM2-032H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human TGM2 Protein with His tag was expressed in HEK293F.
Species	Human
Source	HEK293F
Description	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.
Form	White lyophilized solid
Bio-activity	> 750 U/mg [Activity is determined by measuring the rate of fluorescence enhancement after His6-rhTG2-catalyzed monodansylcadaverine-incorporation into N,N-dimethylated casein according to Lorand et al., Anal. Biochem. 44 (221-231). 1 U is defined as the increase in fluorescence intensity of 1 a.u./min (measured on a Cary eclipse fluorescence spectrophotometer, Varian; λex = 332 nm, λem = 500 nm; band filter = 5 nm; detector strength = 600 V; temperature = 37 centigrade, assay volume = 1 mL)].
Molecular Mass	78 kDa (Val224-allele)

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Purity	> 95 %, visually by SDS-PAGE
Applications	Labelling, immobilisation, conjugation and modification of proteins.
Notes	Intended for research use only, not for use in human, therapeutic or diagnostic applications.
Storage	Store working aliquots at ≤ - 20 centigrade. Avoid repeated freezing and thawing. Delivery is possible at ambient temperature.
Reconstitution	Add the volume of H2O the protein is lyophilized from to the vial of lyophilized powder. Rotate vial gently until solid dissolves. After reconstitution the solution should be stored frozen in working aliquots.
Activation	His6-rhTG2 is a Ca2+-dependent enzyme. Add 10 mM Ca2+ to activate His6-rhTG2.
CAS	80146-85-6
EC	EC 2.3.2.13

GENE INFORMATION

Gene Name	TGM2 transglutaminase 2 (C polypeptide, protein-glutamine-gamma-glutamyltransferase) [Homo sapiens]
Official Symbol	TGM2
Synonyms	TGM2; transglutaminase 2 (C polypeptide, protein-glutamine-gamma-glutamyltransferase); protein-glutamine gamma-glutamyltransferase 2; TGC; TG(C); TGase C; TGase H; TGase-2; TGase-H; C polypeptide; transglutaminase C; transglutaminase H; transglutaminase-2; tissue transglutaminase; protein-glutamine-

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	gamma-glutamyltransferase; TG2; GNAH; G-ALPHA-h;
Gene ID	7052
mRNA Refseq	NM_004613
Protein Refseq	NP_004604
MIM	190196
UniProt ID	P21980

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