Active Recombinant Human TGM2 Protein, His tagged, Biotin Labeled

Cat. No. TGM2-026H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotin Labeled Active Recombinant Human TGM2 Protein with His tag was expressed in E.coli.
Species	Human
Source	E.coli
Conjugation/Label	Biotin
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	Liquid
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.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	~80 kDa (varies due to Degree of Labeling)
Purity	> 95 %, visually by SDS-PAGE
Applications	His6-rhTG2 catalyzes acyl transfer reactions from glutamin residues in proteins or peptides to primary amines, e. g. the formation of ε-(γ-glutamyl) lysine bonds between proteins by transferring the acyl group of a peptide-bound glutamine residue to the primary amino group of a peptide-bound lysine residue. His6-rhTG2 may also be used for immunoprecipitation.
Storage	Store at -20 centigrade in working aliquots. Repeated freezing and thawing is not recommended.
Activation	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-gamma-glutamyltransferase; TG2; GNAH; G-ALPHA-h;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	7052
mRNA Refseq	NM_004613
Protein Refseq	NP_004604
MIM	190196
UniProt ID	P21980

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA