Instruction manual
FOR RESEARCH USE ONLY

Cat.NO.: TP04196
3th Edition
Synonyms:Protein-glutamine gamma-glutamyltransferase 2 isoform a, Transglutaminase 2, G-ALPHA-h, GNAH, HEL-S-45, TG2; TGC

Description:TGM2 also known as Protein-glutamine gamma-glutamyltransferase 2. 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. TGM2 acts as a monomer, is induced by retinoic acid, and appears to be involved in apoptosis. Recombinant human TGM2, fused to His-tag at N -terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form:Liquid, In Phosphate buffered saline (pH7.4) containing 10\% glycerol, 1 mM DTT
Molecular Weight:79.7kDa (710aa)

## Sequences:

MGSSHHHHHHSSGLVPRGSHMGSMAEELVLERCDLELETNGRDHHTADLCREKLVVRRGQPFWLTLHFEGRNY EASVDSLTFSVVTGPAPSQEAGTKARFPLRDAVEEGDWTATVVDQQDCTLSLQLTTPANAPIGLYRLSLEASTGYQ GSSFVLGHFILLFNAWCPADAVYLDSEEERQEYVLTQQGFIYQGSAKFIKNIPWNFGQFEDGILDICLILLDVNPKFLK NAGRDCSRRSSPVYVGRVVSGMVNCNDDQGVLLGRWDNNYGDGVSPMSWIGSVDILRRWKNHGCQRVKYGQC WVFAAVACTVLRCLGIPTRVVTNYNSAHDQNSNLLIEYFRNEFGEIQGDKSEMIWNFHCWVESWMTRPDLQPGYE GWQALDPTPQEKSEGTYCCGPVPVRAIKEGDLSTKYDAPFVFAEVNADVVDWIQQDDGSVHKSINRSLIVGLKIST KSVGRDEREDITHTYKYPEGSSEEREAFTRANHLNKLAEKEETGMAMRIRVGQSMNMGSDFDVFAHITNNTAEEY VCRLLLCARTVSYNGILGPECGTKYLLNLNLEPFSEKSVPLCILYEKYRDCLTESNLIKVRALLVEPVINSYLLAERDLY LENPEIKIRILGEPKQKRKLVAEVSLQNPLPVALEGCTFTVEGAGLTEEQKTVEIPDPVEAGEEVKVRMDLLPLHMGL HKLVVNFESDKLKAVKGFRNVIIGPA

Purity:> 95\% by HPLC
Concentration: $0.5 \mathrm{mg} / \mathrm{ml}$ (determined by Bradford assay)
Endotoxin Level: $<1.0$ EU per 1 ug of protein (determined by LAL method)
Storage:Can be stored at $+4^{\circ} \mathrm{C}$ short term ( $1-2$ weeks). For long term storage, aliquot and store at $-20^{\circ} \mathrm{C}$ or $-70^{\circ} \mathrm{C}$. Avoid repeated freezing and thawing cycles.

