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Datasheet for ABIN7317657

**Transglutaminase 2 Protein (His tag)**

## Overview

Quantity:	100 µg
Target:	Transglutaminase 2 (TGM2)
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Transglutaminase 2 protein is labelled with His tag.

## Product Details

Purpose:	Recombinant Human TGM2/Transglutaminase 2 Protein (His Tag)
Sequence:	Met 1-Ala 687
Characteristics:	A DNA sequence encoding the human TGM2 (NP_004604.2) (Met 1-Ala 687) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

## Target Details

Target:	Transglutaminase 2 (TGM2)
Alternative Name:	TGM2/Transglutaminase 2 ( <a href="#">TGM2 Products</a> )
Background:	Background: Protein-glutamine gamma-glutamyltransferase 2, also known as Tissue transglutaminase, Transglutaminase C, Transglutaminase-2, and TGM2, is a member of the transglutaminase superfamily. TGM2 plays a role in cell growth and survival through the anti-

## Target Details

apoptosis signaling pathway. It is a calcium-dependent acyltransferase which also undergoes a GTP-binding/GTPase cycle even though it lacks any obvious sequence similarity with canonical GTP-binding (G) proteins. TGM2 is a multi-functional protein which catalyzes transamidation reactions or acts as a G-protein in intracellular signalling. As an enzyme which is responsible for the majority of transglutaminase (TG) activity in the brain, TGM2 is likely to play a modulatory role in nervous system development and has regulatory effect on neuronal cell death as well. Most importantly, numerous studies have presented data demonstrating that dysregulation of TGM2 may contribute to the pathogenesis of many neurodegenerative disorders, including Huntington's disease, Alzheimer's disease, Parkinson's disease and amyotrophic lateral sclerosis as well as nervous system injuries.

Synonym: G-ALPHA-h,GNAH,HEL-S-45,TG2,TGC

Molecular Weight: 79.6 kDa

NCBI Accession: [NP\\_004604](#)

Pathways: [Tube Formation](#), [Thromboxane A2 Receptor Signaling](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 50 mM Tris, 100 mM NaCl, 2 mM DTT, 10 % glycerol, pH 8.0

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.