

## AR51861PU-S

## Human Transglutaminase-2 (TGM2) (1-686, His-tag) - Purified

### Alternate names:

Protein-glutamine gamma-glutamyltransferase 2, TGase C, TGase-H, Tissue transglutaminase

### Quantity:

0.1 mg

### Concentration:

0.5 mg/ml (determined by Bradford assay)

### Background:

Tgm2, also known as protein-glutamine gamma-glutamyltransferase 2 is calcium dependent enzyme of the protein-glutamine gamma-glutamyltransferases family. Like other transglutaminases, it crosslinks proteins between an epsilon-amino group of a lysine residue and a gamma-carboxamide group of glutamine residue, creating an inter- or intramolecular bond that is highly resistant to proteolysis (protein degradation). Aside from its crosslinking function, tTG catalyzes other types of reactions including deamidation, GTP-binding/hydrolyzing, and isopeptidase activities. Unlike other members of the transglutaminase family, tTG can be found both in the intracellular and the extracellular spaces of various types of tissues and is found in many different organs including the heart, the liver, and the small intestine.

### Uniprot ID:

[P21981](#)

### NCBI:

[NP\\_033399](#)

### GeneID:

[21817](#)

### Species:

Human

### Source:

E. coli

### Format:

**State:** Liquid purified protein

**Purity:** >85% by SDS - PAGE

**Buffer System:** Liquid, In Phosphate buffered saline (pH7.4) containing 10% glycerol, 1mM DTT.

### Description:

Recombinant mouse Tgm2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

#### AA Sequence:

```
MGSSHHHHHH SSGLVPRGSH MGSMAEELL ERCDLEIQAN GRDHHTADLC QEKLVLRRGQ
RFRLTLYFEG RGYEASVDSL TFGAVTGPDP SEEAGTKARF SLSDNVEEGS WSASVLDQQD
NVLSLQLCTP ANAPIGLYRL SLEASTGYQG SSFVLGHFIL LYNWCPADD VYLDSEEEER
EYVLTQQGFI YQGSVKFIKS VPWNFGQFED GILDTCLMLL DMNPKFLKNR SRDCSRRSSP
IYVGRVVSAM VNCNDDQGV LGRWDNNGYD GISPMWIGS VDILRRWKEH GCQVKYGGC
WVFAAVACTV LRCLGIPTRV VTNYNSAHDQ NSNLLIEYFR NEFGELESNK SEMIWNFHCW
VESWMTRPDL QPGYEGWQAI DPTPQEKSEG TYCCGPVSVR AIKEGDLSTK YDAPFVFAEV
NADVVDWIRQ EDGSVLKSIN RSLVVGQKIS TKSVDGDDRE DITHYKYPE GSPEEREVFT
KANHLNKLAE KEETGVAMRI RVGDSMSMGN DFDVFAHIGN DTSETRECL LLCARTVSYN
GVLGPECSTE DINLTDPYS ENSIPLRILY EKYSGCLTES NLIKVRGLLI EPAANSYLLA
ERDLYLENPE IKIRVLGEPK QNRKLVAEVS LKNPLSDPLY DCIFTVEGAG LTKEQKSVEV
SDPVPAGDLV KARVDLFTPT IGLHKLNVNF QCDKLKSVKG YRNVIIGPA
```

**Molecular weight:** 79.4 kDa (709aa)

**Storage:** Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:** Nanda N., et al. (1999) Arch. Biochem. Biophys. 366:151-156

**Pictures:**

