

Active Transglutaminase 2 (His-tagged), human recombinant protein
TG2, tTG, tissue transglutaminase, transglutaminase C, TGC,
protein-glutamine-gamma-glutamyltransfer
Catalog # PBV11276r

Specification

Active Transglutaminase 2 (His-tagged), human recombinant protein - Product info

Primary Accession	P21980
Calculated MW	79.5 kDa (1-687 aa + N-terminal polyhistidine tag). KDa

Active Transglutaminase 2 (His-tagged), human recombinant protein - Additional Info

Gene ID	7052
Gene Symbol	TGM2
Other Names	
TG2, tTG, tissue transglutaminase, transglutaminase C, TGC, protein-glutamine-gamma-glutamyltransferase, TGM2	
Gene Source	Human
Source	E.coli
Assay&Purity	SDS-PAGE; ≥90%
Assay2&Purity2	HPLC;
Recombinant	Yes
Results	>400 mU/mg
Sequence	1-687 aa of human transglutaminase 2 + N-terminal polyhistidine tag

Target/Specificity

Transglutaminase 2

Application Notes

Reconstitute to 0.1-0.5 mU/ µl in 20 mM Tris, 120 mM NaCl, 10 mM DTT, pH 7.5 containing 20% glycerol. Aliquot and store at -80°C. Avoid repeated freezing and thawing cycles.

Format

Lyophilized powder

Storage

-80°C; Lyophilized from 5 mg/ml solution in a proprietary buffer.

Active Transglutaminase 2 (His-tagged), human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Active Transglutaminase 2 (His-tagged), human recombinant protein - Images**Active Transglutaminase 2 (His-tagged), human recombinant protein - Background**

Tissue transglutaminase, a 78-kDa calcium dependent enzyme (EC 2.3.2.13), is found both in the intracellular and the extracellular spaces of various types of tissues. TG2 crosslinks proteins between the ϵ -amino group of a lysine residue and the γ -carboxamide group of glutamine residue, creating an inter- or intramolecular bond that is highly resistant to proteolysis (protein degradation). TG2 also possesses deamidation, GTP-binding/hydrolyzing, and isopeptidase activities. Intracellular TG2 is thought to play an important role in apoptosis, while extracellular TG2 has been linked to cell adhesion, ECM stabilization, wound healing, receptor signaling, cellular proliferation, and cellular motility.

Active Transglutaminase 2 (His-tagged), human recombinant protein - References

Gentile V., et al. J. Biol. Chem. 266:478-483(1991).
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Ota T., et al. Nat. Genet. 36:40-45(2004).