

## **Product datasheet for TA326878**

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## Transglutaminase 2 (TGM2) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** ICC/IF, IHC, WB

Recommended Dilution: WB: 1:500-1:2000

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

**Isotype:** IgG

Clonality: Polyclonal

**Immunogen:** Recombinant protein of human TGM2

Formulation: Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50%

glycerol, pH7.3

**Concentration:** lot specific

**Purification:** Affinity purification

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** transglutaminase 2

Database Link: NP 004604

Entrez Gene 21817 MouseEntrez Gene 56083 RatEntrez Gene 7052 Human

P21980



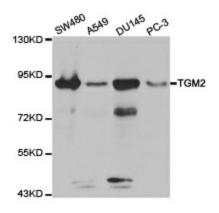
Background:

Transglutaminase 2 (TGM2) is a calcium-dependent enzyme that cross-links both cytosolic and extracellular matrix proteins by catalyzing the formation of bonds between lysine and glutamine residues. This bifunctional enzyme also has intrinsic GTPase activity, and it has been suggested that regulation of the transamidase activity might be regulated through a G-protein coupled receptor-signaling pathway. In cross-linking peptides, TGM2 helps to regulate cytoskeletal structure, cell migration, apoptosis and cell-matrix adhesion. In addition, the enzyme plays an important role in wound healing and the immune response. TGM2 has exhibited kinase activity in vitro, with insulin-like growth factor-binding protein-3 (IGFBP-3) as one possible substrate. This widely expressed protein is localized to the cytosol and nucleus, but has also been isolated from the cell surface and extracellular matrix. Because of its interaction with a number of different substrates, and its role in the response to injury, TGM2 has been associated with the pathology of a number of human disorders. It has long been recognized as the major autoantigen in celiac disease; altered TGM2 expression or activity may be associated with Alzheimer disease, Huntington disease, arteriosclerosis, diabetes, and numerous forms of cancer.

**Synonyms:** G-ALPHA-h; GNAH; HEL-S-45; TG2; TGC

Protein Families: Druggable Genome
Protein Pathways: Huntington's disease

## **Product images:**



Western blot analysis of extracts of Hela cell and HepG2 cell lysate using TGM2 antibody.