

# Product datasheet

info@arigobio.com

## ARG41154 anti-TGM3 / TGE antibody

Package: 50 μg Store at: -20°C

### **Summary**

**Product Description** Goat Polyclonal antibody recognizes TGM3 / TGE

**Tested Reactivity** Hu **Tested Application** WB Host Goat

Clonality Polyclonal

Isotype IgG

**Target Name** TGM3 / TGE

**Species** Human

Immunogen Synthetic peptide around the internal region of Human TGM3. (C-TLEVLNEARVRKP, NP\_003236.3)

Conjugation Un-conjugated

**Alternate Names** Protein-glutamine gamma-glutamyltransferase E; E; Transglutaminase-3; TGE; TGase E; TGase-3;

Transglutaminase E; TG; EC 2.3.2.13

#### **Application Instructions**

Application table	Application	Dilution
	WB	0.3 - 1 μg/ml
Application Note	WB: Recommend incubate at RT for 1h.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations	

should be determined by the scientist.

**Observed Size** ~ 80 kDa

#### **Properties**

Form Liquid

Purification Ammonium sulphate precipitation followed by affinity purification with immunogen.

Buffer Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 0.5% BSA Concentration 0.5 mg/ml

For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot Storage instruction

> and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol TGM3

Gene Full Name transglutaminase 3

Background 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. The protein encoded by this gene consists of two polypeptide chains activated from a single precursor protein by proteolysis. The encoded protein is involved the later stages of cell envelope formation in

the epidermis and hair follicle. [provided by RefSeq, Jul 2008]

Function Catalyzes the calcium-dependent formation of isopeptide cross-links between glutamine and lysine

residues in various proteins, as well as the conjugation of polyamines to proteins. Involved in the formation of the cornified envelope (CE), a specialized component consisting of covalent cross-links of proteins beneath the plasma membrane of terminally differentiated keratinocytes. Catalyzes small proline-rich proteins (SPRR1 and SPRR2) and LOR cross-linking to form small interchain oligomers, which are further cross-linked by TGM1 onto the growing CE scaffold (By similarity). In hair follicles,

involved in cross-linking structural proteins to hardening the inner root sheath. [UniProt]

Calculated Mw 77 kDa

PTM Activated by proteolytic processing. In vitro activation is commonly achieved by cleavage with dispase,

a neutral bacterial protease. Dispase cleavage site was proposed to lie between Ser-470 and Ser-471 (PubMed:8099584) or between Pro-465 and Phe-466 (PubMed:16565075). Physiological activation may

be catalyzed by CTSL and, to a lesser extent, by CTSS, but not by CTSB, CTSD nor CTSV

(PubMed:16565075). [UniProt]

Cytoplasm. [UniProt]

#### **Images**

Cellular Localization

250kDa 150kDa 100kDa 75kDa 50kDa 37kDa 25kDa 20kDa Human tonsil

#### ARG41154 anti-TGM3 / TGE antibody WB image

Western blot: 35  $\mu g$  of Human tonsil lysate (in RIPA buffer) stained with ARG41154 anti-TGM3 / TGE antibody at 0.3  $\mu g/ml$  dilution and incubated at RT for 1 hour.