

# TGM3 Rabbit pAb

Catalog # AP98130

## Product Information

---

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>             | IHC-P, IHC-F, IF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Primary Accession</b>       | <a href="#">Q08188</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Other Accession</b>         | <a href="#">Q08188</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Host</b>                    | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Clonality</b>               | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Calculated MW</b>           | 76632                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Physical State</b>          | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen</b>               | KLH conjugated synthetic peptide derived from human TGM3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Epitope Specificity</b>     | 601-693/693                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Isotype</b>                 | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Purity</b>                  | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Buffer</b>                  | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>SIMILARITY</b>              | Belongs to the transglutaminase superfamily. Transglutaminase family.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>SUBUNIT</b>                 | Consists of two polypeptide chains, which are synthesized as a precursor form of a single polypeptide.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Important Note</b>          | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Background Descriptions</b> | 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. Transglutaminase 3 consists of two polypeptide chains activated from a single precursor protein by proteolysis. Transglutaminase 3 is involved the later stages of cell envelope formation in the epidermis and hair follicle. |

## Additional Information

---

|                    |                                                                                                                                                                                                                                                                                                                                         |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>     | 7053                                                                                                                                                                                                                                                                                                                                    |
| <b>Other Names</b> | TGE; UHS2; TG E; TG(E); TGase E; TGase-3; we; TGM3_HUMAN; TGM3; Transglutaminase E (TG(E)   TGE   TGase E); Transglutaminase-3 (TGase-3); 2.3.2.13; TGM3_MOUSE; Tgase3; transglutaminase 3; transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase); E polypeptide, protein-glutamine-gamma-glutamyltransferase |
| <b>Dilution</b>    | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500                                                                                                                                                                                                                                                                                            |
| <b>Storage</b>     | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.                                                                                                                                         |

## Protein Information

---

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | TGM3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Function</b>          | 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. |
| <b>Cellular Location</b> | Cytoplasm.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.