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# Transglutaminase 6 Rabbit pAb

Catalog # AP98781

## Product Information

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| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | O95932 |
| **Other Accession** | O95932 |
| **Reactivity** | Rat |
| **Predicted** | Human, Mouse, Dog, Horse, Sheep |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 79312 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human TGase6/Transglutaminase 6 |
| **Epitope Specificity** | 551-640/706 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the transglutaminase superfamily. Transglutaminase family. |
| **DISEASE** | Defects in TGM6 are the cause of spinocerebellar ataxia type 35 (SCA35) [MIM:613908]. A form of spinocerebellar ataxia, a clinically and genetically heterogeneous group of cerebellar disorders. Patients show progressive incoordination of gait and often poor coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA35 patients commonly show upper limb involvement and torticollis. There is no cognitive impairment. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | Terminally differentiating mammalian epidermal cells acquire an insoluble, 10 to 20 nm thick protein deposit on the intracellular surface of the plasma membrane, known as the cross-linked cell envelope (CE). The CE is a component of the epidermis that is generated through the formation of disulfide bonds and gamma-glutamyl-lysine isodipeptide bonds, which are formed by the action of transglutaminases (TGases). TGases are Ca2+-dependent enzymes, which catalyze the formation of isopeptide bonds by transferring an amine to a glutaminyl residue, thereby cross-linking glutamine residues and lysine residues in substrate proteins. TGases influence numerous biological processes, including blood coagulation, epidermal differentiation, seminal fluid coagulation, fertilization, cell differentiation and apoptosis. TGase6 (transglutaminase 6), also known as TGM6, TGY or TGM3L, is a 706 amino acid protein that catalyzes the cross-linking of proteins and the conjugation of proteins to polyamines. As a result of alternative splicing, two TGase6 isoforms exist. |

## Additional Information

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| **Gene ID** | 343641 |
| **Other Names** | SCA35; TG6; TGM3L; TGY; dJ734P14.3; RGD1565348; TGM3L_HUMAN; TGM6; Transglutaminase Y (TGY \| TGase Y); Transglutaminase-3-like (TGase-3-like); Transglutaminase-6 (TG6 \| TGase-6); 2.3.2.13; transglutaminase 6; transglutaminase 3-like; spinocerebellar ataxia 35; protein-glutamine gamma-glutamyltransferase 6 |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **Storage** | 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

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| **Name** | TGM6 |
| **Synonyms** | TGM3L |
| **Function** | Catalyzes the cross-linking of proteins and the conjugation of polyamines to proteins. |
| **Cellular Location** | Cytoplasm |

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