

TGM7 Antibody

Catalog # ASC11389

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q96PF1
Other Accession	AF363393 , 16445035
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	79941
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TGM7 antibody can be used for detection of TGM7 by Western blot at 1 μ g/mL. Antibody can also be used for immunocytochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 10 μ g/mL.

Additional Information

Gene ID	116179
Other Names	Protein-glutamine gamma-glutamyltransferase Z, Transglutaminase Z, TG(Z), TGZ, TGase Z, 2.3.2.13, Transglutaminase-7, TGase-7, TGM7
Target/Specificity	TGM7; TGM7 antibody is predicted to not cross-react with other TGase protein family members. At least two isoforms of TGM7 are known to exist; this antibody will recognize both isoforms.
Reconstitution & Storage	TGM7 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	TGM7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TGM7
Function	Catalyzes the cross-linking of proteins and the conjugation of polyamines to proteins.
Tissue Location	Widely expressed.

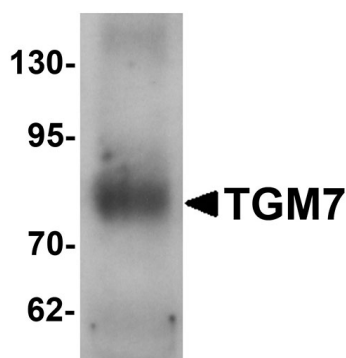
Background

TGM7 Antibody: Transglutaminases (TGM) are a family of structurally and functionally related Ca²⁺-dependent enzymes (TGases) that stabilize protein assemblies through the formation of gamma-glutamyl-epsilon lysine crosslinks. TGases influence numerous biological processes, including blood coagulation, cell differentiation, fertilization and apoptosis. TGM7 belongs to the transglutaminase superfamily and is also thought to catalyze the cross-linking of proteins, often resulting in stabilization of protein assemblies. Little is known of the role of TGM7, but defects in the highly related protein TGM5 are associated with acral peeling skin syndrome.

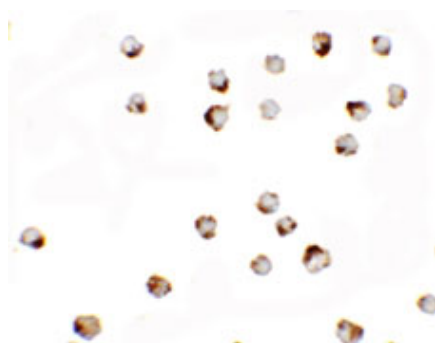
References

Ueki S, et al. Dual functions of transglutaminase in novel cell adhesion. *J. Cell Sci.* 1996; 109:2727-35
Grenard P, Bates MK, and Aeschlimann D. Evolution of transglutaminase genes: identification of a transglutaminase gene cluster on human chromosome 15q15. *J. Biol. Chem.* 2001; 276:33066-78.
Cassidy AJ, van Steensel MA, Steijlen PM, et al. A homozygous missense mutation in TGM7 abolishes epidermal transglutaminase 5 activity and causes acral peeling skin syndrome. *Am. J. Hum. Genet.* 2005; 77:909-17.

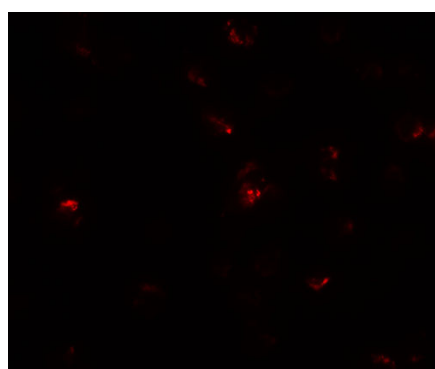
Images



Western blot analysis of TGM7 in human lung tissue lysate with TGM7 antibody at 1 µg/mL.



Immunocytochemistry of TGM7 in A549 cells with TGM7 antibody at 2.5 µg/mL.



Immunofluorescence of TGM7 in A549 cells with TGM7 antibody at 10 µg/mL.

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