

**AP02094SU-N****Polyclonal Antibody to Transglutaminase-3 (TGM3) - Serum****Alternate names:**

Protein-glutamine gamma-glutamyltransferase E, TGE, TGase

**Quantity:**

0.1 ml

**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]

**Uniprot ID:**[Q08188](#)**NCBI:**[NP\\_003236](#)**GeneID:**[7053](#)**Host:**

Rabbit

**Immunogen:**Recombinant Human epidermal Transglutaminase [TGe]  
**Genename:** TGM3**Format:****State:** Lyophilized Serum**Reconstitution:** Restore in aqua bidest to initial volume.**Applications:****ELISA** (Ref.1)**Immunofluorescence.****Immunohistochemistry on Cryosections:** 1/100-1/3200 (Ref.1,2).

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

This antibody detects Epidermal Transglutaminase [TGe].

**Species:** Human.

Other species not tested.

**Add. Information:**

LocusID 7053

**Storage:**

Store lyophilized at 2-8°C and reconstituted at -20°C.

Avoid repeated freezing and thawing.

Shelf life: One year from despatch.

**General Readings:**

1. Sardy M, Karpati S, Merkl B, Paulsson M, Smyth N. Epidermal transglutaminase (TGase 3) is the autoantigen of dermatitis herpetiformis. *J Exp Med.* 2002 Mar 18;195(6):747-757.

2. Oji V, Hautier JM, Ahvazi B, Hausser I, Aufenvenne K, Walker T, et al. Bathing suit ichthyosis is caused by transglutaminase-1 deficiency: evidence for a temperature-sensitive phenotype. *Hum Mol Genet.* 2006 Nov 1;15(21):3083-97. Epub 2006 Sep 12. PubMed PMID: 16968736.

## Pictures:

**Immunofluorescence** of TGe staining in Cryosection of Human skin of dermatitis herpetiformis patient. The section was incubated with AP02094SU (1/100) followed by incubation with Cy3-labeled Goat ant-Rabbit antibody. This antibody stains the epidermis and aggregates within the dermal papillae (Red). TGe colocalizes with IgA (Green) in these precipitates. *Sardy M et al. (2002) J Exp Med 195(6): 747-757.*

