### For Research Use Only

# TGM1 Polyclonal antibody

Catalog Number: 12912-3-AP 34 Publications



**Purification Method:** 

WB 1:1000-1:8000

protein lysate

IHC 1:200-1:800

Antigen affinity purification

IP 0.5-4.0 ug for 1.0-3.0 mg of total

Recommended Dilutions:

**Basic Information** 

Catalog Number: GenBank Accession Number:

 12912-3-AP
 BC034699

 Size:
 GeneID (NCBI):

 150ul, Concentration: 500 ug/ml by
 7051

Nanodrop; UNIPROT ID:
Source: P22735
Rabbit Full Name:

 Isotype:
 transglutaminase 1 (K polypeptide

 IgG
 epidermal type I, protein-glutamine-gamma-glutamyltransferase)

Immunogen Catalog Number: gamma-glutam:
AG3905 Calculated MW:

817 aa, 90 kDa

Observed MW: 90 kDa

**Applications** 

Tested Applications: WB, IHC, IP, ELISA Cited Applications:

WB, IHC, IF, ELISA
Species Specificity:
human, mouse
Cited Species:
human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: human saliva, mouse kidney tissue

IP: mouse kidney tissue,

IHC: human cervical cancer tissue, human bowen disease, human brown disease, human cervix tissue, human skin tissue

## **Background Information**

Transglutaminase 1 is an epidermal enzyme that is expressed during the terminal differentiation of keratinized squamous epithelium to form cornified cell envelopes in differentiated keratinocytes. Mutation of TGM1 has been linked to various epidermal diseases. This antibody recognizes the endogenous 90 kDa TGM1 proteins.

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Laurence Cantin-Warren	30223550	J Funct Biomater	IF
Jie Zhang	34646892	Burns Trauma	WB,IHC
Risa Ikutama	36455652	J Invest Dermatol	WB

Storage

Storage

Store at -20°C. Stable for one year after shipment.

Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

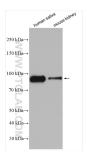
\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com W: ptglab.com This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

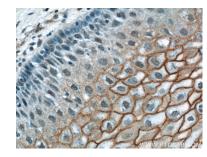
#### Selected Validation Data



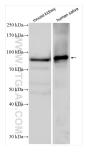
Various lysates were subjected to SDS PAGE followed by western blot with 12912-3-AP (TGM1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



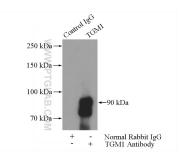
mouse kidney tissue were subjected to SDS PAGE followed by western blot with 12912-3-AP (TGM1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



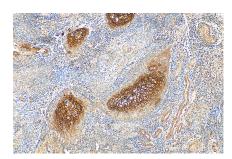
Immunohistochemical analysis of paraffinembedded human cervix using 12912-3-AP (TGM1 antibody) at dilution of 1:200 (under 40x lens).



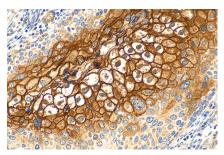
Various lysates were subjected to SDS PAGE followed by western blot with 12912-3-AP (TGM1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



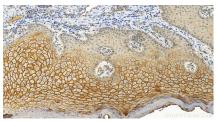
IP result of anti-TGM1 (IP:12912-3-AP, 4ug; Detection:12912-3-AP 1:1000) with mouse kidney tissue lysate 4000ug.



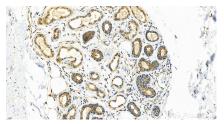
Immunohistochemical analysis of paraffinembedded human cervical cancer tissue slide using 12912-3-AP (TGM1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



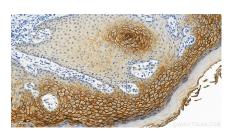
Immunohistochemical analysis of paraffinembedded human cervical cancer tissue slide using 12912-3-AP (TGM1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human brown disease slide using 12912-3-AP (TGM1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human bowen disease slide using 12912-3-AP (TGM1 antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human bowen disease slide using 12912-3-AP (TGM1 antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).