

Product Name: KD-Validated Transglutaminase 2 Mouse Monoclonal Antibody**Catalog #: KVA00605**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,IHC-P
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in crude ascites with 0.01% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 77.3kDa

Antigen Information

Gene Name	TGM2
Alternative Names	TGM2; Transglutaminase 2; TGC; C Polypeptide, Protein-Glutamine-Gamma-Glutamyltransferase; Protein-Glutamine Noradrenalinyltransferase TGM2; Protein-Glutamine Gamma-Glutamyltransferase 2; Protein-Glutamine Histaminytransferase TGM2; Protein-Glutamine Dopaminytransferase TGM2; Protein-Glutamine Serotonyltransferase TGM2; Protein-Glutamine Deamidase TGM2; Erythrocyte Transglutaminase; Tissue Transglutaminase; Transglutaminase II; Protein G Alpha(H); Transglutaminase C; Transglutaminase H; Isopeptidase TGM2; Heart G Alpha(H); HhG Alpha(H); EC 2.3.2.13; TGase II; TGase C; TGase H; TGase-2; TTgase; TG(C); G(H); HTG2; TG2; TTG; Transglutaminase 2 (C Polypeptide, Protein-Glutamine-Gamma-Glutamyltransferase); Transglutaminase-2; EC 3.5.1.44; EC 3.4.-.-; EC 2.3.1.-

Gene ID	7052.0
SwissProt ID	P21980
Immunogen	Recombinant protein of human Transglutaminase 2

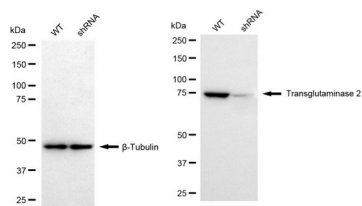
Background

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 acts as a monomer, is induced by retinoic acid, and appears to be involved in apoptosis. Finally, the encoded protein is the autoantigen implicated in celiac disease. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

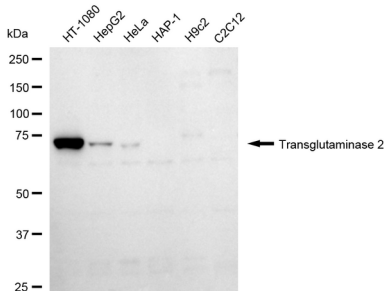
Research Area

Cell Biology

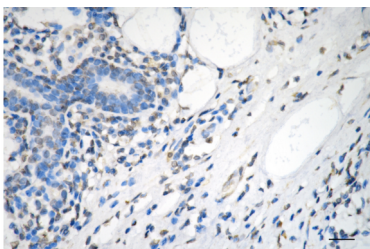
Image Data



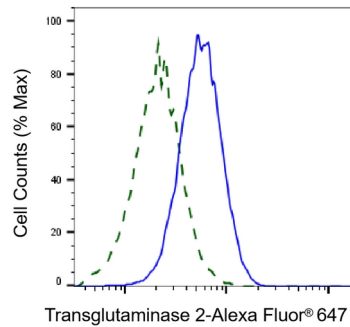
Western blotting analysis using transglutaminase 2 antibody (KVA00605). Transglutaminase 2 expression in wild-type (WT) and transglutaminase 2 (TGM2) shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with transglutaminase 2 antibody (KVA00605, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



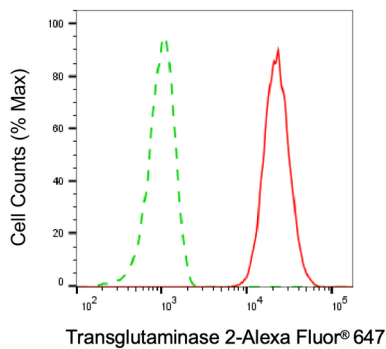
Western blotting analysis using transglutaminase 2 antibody (KVA00605). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with transglutaminase 2 antibody (KVA00605, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using transglutaminase 2 antibody (KVA00605, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Validation of Transglutaminase 2 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HT-1080 cells were stained with Transglutaminase 2 antibody (KVA00605, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Transglutaminase 2 expression in HT-1080 cells using Transglutaminase 2 antibody (KVA00605, 1:2,000). Green, isotype control; red, Transglutaminase 2.