

Product Name: KD-Validated TRPM7 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00888**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 212.7kDa

Antigen Information

Gene Name	TRPM7 TRPM7; Transient Receptor Potential Cation Channel Subfamily M Member 7; LTRPC7; CHAK1; TRP-PLIK; Long Transient Receptor Potential Channel 7; Channel-Kinase 1; EC
Alternative Names	2.7.11.1; LTrpC-7; Transient Receptor Potential Cation Channel, Subfamily M, Member 7; Transient Receptor Potential-Phospholipase C-Interacting Kinase; LTRPC Ion Channel Family Member 7; ALSPDC; LTrpC7; CHAK
Gene ID	54822.0
SwissProt ID	Q96QT4
Immunogen	A synthesized peptide derived from human TRPM7

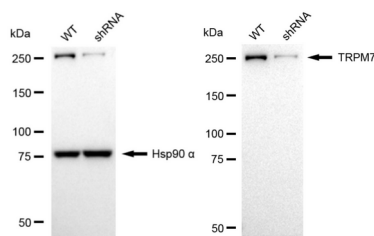
Background

This gene belongs to the melastatin subfamily of transient receptor potential family of ion channels. The protein encoded by this gene is both an ion channel and a serine/threonine protein kinase. The kinase activity is essential for the ion channel function, which serves to increase intracellular calcium levels and to help regulate magnesium ion homeostasis. The encoded protein is involved in cytoskeletal organization, cell adhesion, cell migration and organogenesis. Defects in this gene are a cause of amyotrophic lateral sclerosis-parkinsonism/dementia complex of Guam. The gene may also be associated with defects of cardiac function. [provided by RefSeq, Aug 2017]

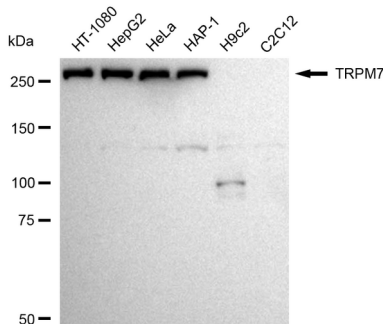
Research Area

Neuroscience,Signal Transduction,Metabolism

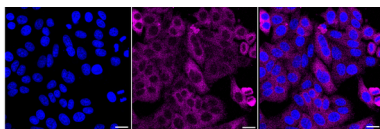
Image Data



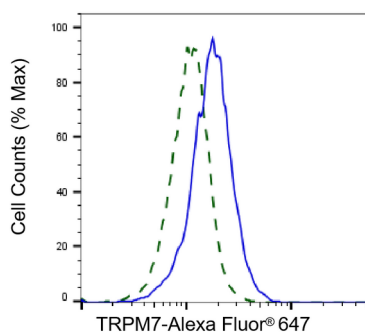
Western blotting analysis using TRPM7 antibody (KVA00888). TRPM7 expression in wild type (WT) and TRPM7 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with TRPM7 antibody (KVA00888, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



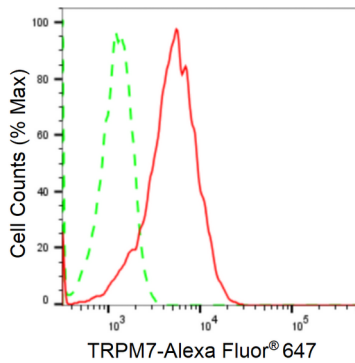
Western blotting analysis using TRPM7 antibody (KVA00888). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with TRPM7 antibody (KVA00888, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with TRPM7 antibody (KVA00888, 1:1,000). Nuclei were stained blue with DAPI;TRPM7 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of TRPM7 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with TRPM7 antibody (KVA00888, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of TRPM7 expression in HepG2 cells using TRPM7 antibody (KVA00888, 1:2,000). Green, isotype control; red, TRPM7.