Product datasheet

Anti-TRPM7 Antibody

Catalog Number: *A00789-1*

BOSTER
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Basic Information

Product Name	Anti-TRPM7 Antibody
Gene Name	TRPM7
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ICC/IF, FCM, ELISA
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E. coli-derived human TRPM7 recombinant protein (Position: K777-K905). Human TRPM7 shares 91.1% and 92.4% amino acid (aa) sequence identity with mouse and rat TRPM7, respectively.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	212 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 Immunocytochemistry/Immunofluorescence (ICC/IF):1:50-400 Flow Cytometry (Fixed): 1:50-200

Storage

12 months from date of receipt，-20℃ as supplied.

Background Information

Transient receptor potential cation channel, subfamily M, member 7, also known as TRPM7, is a human gene encoding a protein of the same name. It is mapped to 15q21.2. 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.

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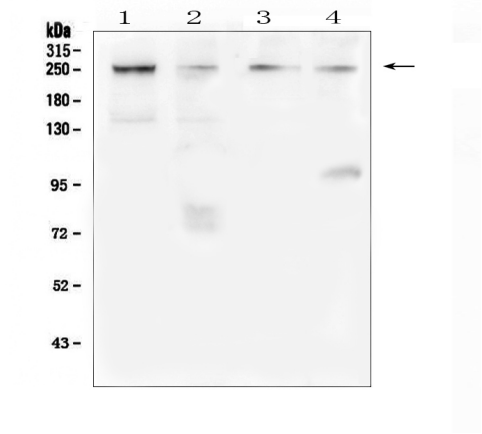
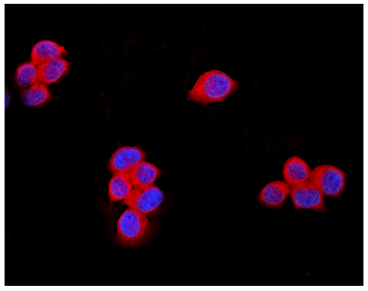
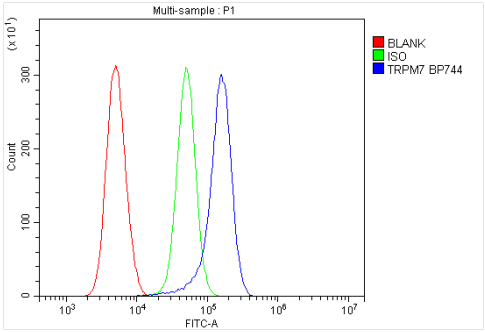
Selected Validation Data



Western blot analysis of TRPM7 using anti-TRPM7 antibody (A00789-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human COLO-320 whole cell lysates,
Lane 3: human 22RV1 whole cell lysates,
Lane 4: human SGC-7901 whole cell lysates.
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-TRPM7 antigen affinity purified polyclonal antibody (A00789-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TRPM7 at approximately 212 kDa. The expected band size for TRPM7 is at 212 kDa.



ICC/IF analysis of TRPM7 using anti-TRPM7 antibody (A00789-1). TRPM7 was detected in an immunocytochemical section of MCF-7 cells. The section was incubated with rabbit anti-TRPM7 Antibody (A00789-1) at a dilution of 1:100. Fluoro594-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1142) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of THP-1 cells using anti-TRPM7 antibody (A00789-1).
Overlay histogram showing THP-1 cells stained with A00789-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TRPM7 Antibody (A00789-1) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit

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IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.