BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-TRPM7 Monoclonal Antibody

Catalog Number: M00789

Overview

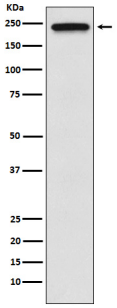
Product Name	Anti-TRPM7 Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-TRPM7 Monoclonal Antibody catalog # M00789. Tested in WB, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, ICC, WB
Clonality	Monoclonal ADGD-20
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q96QT4

Technical Details

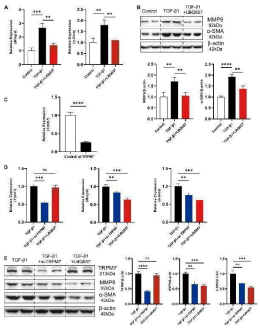
Immunogen	A synthesized peptide derived from human TRPM7
Isotype	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Form	Liquid
Concentration	0.5mg/ml
Purification	Affinity-chromatography
Suggested Dilutions	WB 1:500-2000 ICC/IF 1:50-200 FC 1:100

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

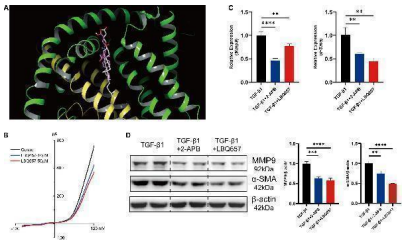
Anti-TRPM7 Monoclonal Antibody (M00789) Images



Western blot analysis of TRPM7 expression in HeLa cell lysate.



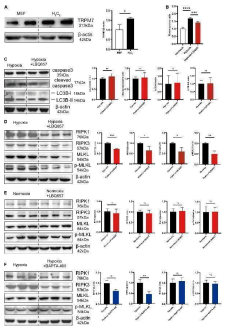
LBQ657 significantly extenuated TGF-beta1 induced cardiac fibroblast activation in MEF. (A) mRNA expression of Mmp9 and alpha -Sma in control MEF, MEF treated with TGF-beta1 and MEF treated with LBQ657 + TGF-beta1. (B) Protein levels of MMP9 and alpha-SMA in the rats. (C) The efficiency of the siRNA used to reduce the mRNA expression of TRPM7 in MEF. (D) mRNA expression of Trpm7 , Mmp9 and alpha -Sma in MEF treated with TGF-beta1, MEF transfected with si-TRPM7 and treated with TGF-beta1, MEF treated with LBQ657 + TGF-beta1. (E) Protein levels of TRPM7, MMP9 and alpha-SMA in the rats. The data presented are mean ± SD. Each group contained the results of three independent repeated trials. 18S RNA was used as the internal reference gene and beta-actin was used as the internal reference protein for normalization and statistical analysis. ∗∗∗∗ P < 0.0001, ∗∗∗ P < 0.001, and ∗∗ P < 0.01.Index in PubMed under a CC BY license. PMID: 34778271



LBQ657 protected against fibrosis by blocking TRPM7 channel. (A) The virtual binding mode of NEPi and natural cholesterol hemisuccinateon ligand (as control) on TRPM7. NEPi (red) and cholesterol hemisuccinate (gray) are shown as a stick model. (B) Current amplitude of TRPM7-like current recorded in neonatal rat cardiac fibroblasts in control cell (black), LBQ657-10 uM treated cell (blue) and LBQ657-50 uM treated cell (red). (C) mRNA expression of Mmp9 and alpha -Sma in MEF treated with TGF-beta1, MEF treated with 2-APB + TGF-beta1, and MEF treated with LBQ657 + TGF-beta1. (D) Protein levels of MMP9 and alpha-SMA in the rats. The data presented are mean ± SD. Each group contained the results of three independent repeated trials. 18S RNA was used as the internal reference gene and beta-actin was used as the internal reference protein for normalization and statistical analysis. ∗∗∗∗ P < 0.0001, ∗∗∗ P < 0.001, and ∗∗ P < 0.01.Index in PubMed under a CC BY license. PMID: 34778271

LBQ657 reduced hypoxia-induced necrosis by inhibiting TRPM7-mediated Ca 2+ influx in cardiomyocytes. (A) Comparison of TRPM7 protein levels in MEF and H 9 C 2 cells. (B) Fluorescence intensity of Fluo-4-AM fluorescent dye

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com



in 488 nm excitation light of normoxic H 9 C 2 , hypoxic H 9 C 2 and hypoxic H 9 C 2 pre-treated with LBQ657. (C) Protein levels of caspase3, cleaved caspase3, LC3B-I and LC3B-II in hypoxic H 9 C 2 and hypoxic H 9 C 2 pre-treated with LBQ657. (D) Protein levels of RIPK1/RIPK3/MLKL/p-MLKL in hypoxic H 9 C 2 and hypoxic H 9 C 2 pre-treated with LBQ657. (E) Protein levels of RIPK1/RIPK3/MLKL/p-MLKL in normoxic H 9 C 2 and normoxic H 9 C 2 treated with LBQ657. (F) Protein levels of RIPK1/RIPK3/MLKL/p-MLKL in hypoxic H 9 C 2 and hypoxic H 9 C 2 pre-treated with BAPTA-AM. The data presented are mean ± SD. Each group contained the results of three independent repeated trials. beta-actin was used as the internal reference protein for normalization and statistical analysis. ∗∗∗∗ P < 0.0001, ∗∗∗ P < 0.001, ∗∗ P < 0.01, and ∗ P < 0.05.Index in PubMed under a CC BY license. PMID: 34778271

Anti-TRPM7 Monoclonal Antibody

For Research Use Only. Not for use in diagnostic procedures.