

Anti-TRPM8 Monoclonal Antibody

Catalog # ABO14516

Specification

Anti-TRPM8 Monoclonal Antibody - Product Information

Application
Primary Accession
Host
Rabbit
Isotype
Reactivity
Clonality
Format
WB, IF, ICC
Q7Z2W7
Rabbit
Rabbit
Rabbit
Rabbit
Human, Mouse
Monoclonal
Liquid

Description

Anti-TRPM8 Monoclonal Antibody . Tested in WB, ICC/IF applications. This antibody reacts with Human, Mouse.

Anti-TRPM8 Monoclonal Antibody - Additional Information

Gene ID 79054

Other Names

Transient receptor potential cation channel subfamily M member 8, Long transient receptor potential channel 6, LTrpC-6, LTrpC6, Transient receptor potential p8, Trp-p8, TRPM8, LTRPC6, TRPP8

Application Details

WB 1:500-1:2000
ICC/IF 1:50-1:200

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunoaen

A synthesized peptide derived from human TRPM8

Purification

Affinity-chromatography

Storage 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.

Anti-TRPM8 Monoclonal Antibody - Protein Information

Name TRPM8

Synonyms LTRPC6, TRPP8



Function

Receptor-activated non-selective cation channel involved in detection of sensations such as coolness, by being activated by cold temperature below 25 degrees Celsius. Activated by icilin, eucalyptol, menthol, cold and modulation of intracellular pH. Involved in menthol sensation. Permeable for monovalent cations sodium, potassium, and cesium and divalent cation calcium. Temperature sensing is tightly linked to voltage-dependent gating. Activated upon depolarization, changes in temperature resulting in graded shifts of its voltage- dependent activation curves. The chemical agonist menthol functions as a gating modifier, shifting activation curves towards physiological membrane potentials. Temperature sensitivity arises from a tenfold difference in the activation energies associated with voltage-dependent opening and closing. In prostate cancer cells, shows strong inward rectification and high calcium selectivity in contrast to its behavior in normal cells which is characterized by outward rectification and poor cationic selectivity. Plays a role in prostate cancer cell migration (PubMed:25559186). Isoform 2 and isoform 3 negatively regulate menthol- and cold-induced channel activity by stabilizing the closed state of the channel.

Cellular Location

Cell membrane; Multi-pass membrane protein. Membrane raft. Endoplasmic reticulum membrane. Note=Localizes to membrane rafts but is also located in the cell membrane outside of these regions where channel response to cold is enhanced compared to membrane rafts (By similarity). Located in the endoplasmic reticulum in prostate cancer cells.

Tissue Location

Expressed in prostate. Also expressed in prostate tumors and in non-prostatic primary tumors such as colon, lung, breast and skin tumors.

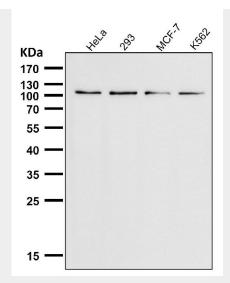
Anti-TRPM8 Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

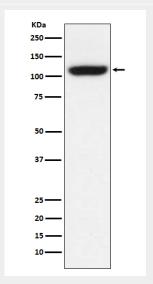
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-TRPM8 Monoclonal Antibody - Images





All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



Western blot analysis of TRPM8 expression in A549 cell lysate.

Anti-TRPM8 Monoclonal Antibody - Background

Activated by icilin, eucalyptol, menthol, cold and modulation of intracellular pH. Involved in menthol sensation. Permeable for monovalent cations sodium, potassium, and cesium and divalent cation calcium.