

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

Non-selective ion channel permeable to monovalent and divalent cations, including Na(+), K(+), and Ca(2+), with higher permeability for Ca(2+). Activated by multiple factors, such as temperature, voltage, pressure, and changes in osmolality. Activated by cool temperatures (<23-28 degrees Celsius) and by chemical ligands evoking a sensation of coolness, such as menthol and icilin therefore plays a central role in the detection of environmental cold temperatures (PubMed:15306801, PubMed:15852009, PubMed:16174775, PubMed:25559186, PubMed:37857704). TRPM8 is a voltage-dependent channel; its activation by cold or chemical ligands shifts its voltage thresholds towards physiological membrane potentials, leading to the opening of the channel (PubMed:15306801). In addition to its critical role in temperature sensing, regulates basal tear secretion by sensing evaporation-induced cooling and changes in osmolality (By similarity). May plays a role in prostate cancer cell migration (PubMed: <a $href="http://www.uniprot.org/citations/16174775"\ target="_blank">16174775, PubMed:<a https://www.uniprot.org/citations/16174775"$ href="http://www.uniprot.org/citations/25559186" target="blank">25559186).

Cellular Location

Cell membrane; Multi-pass membrane protein. Membrane raft {ECO:0000250|UniProtKB:Q8R4D5}. Endoplasmic reticulum membrane. Note=Lipid raft association modulates TRPM8 channel activity (By similarity) Located in the endoplasmic reticulum in prostate cancer cells (PubMed:11325849, PubMed:16174775). {ECO:0000250|UniProtKB:Q8R4D5, ECO:0000269|PubMed:11325849, ECO:0000269|PubMed:16174775}

Tissue Location

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

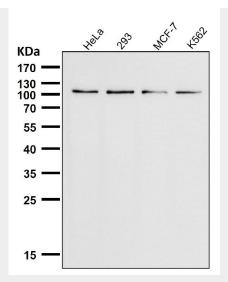
Anti-TRPM8 Monoclonal Antibody - Protocols

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

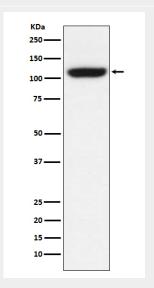
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.