



TRPV4 Monoclonal Antibody

Catalog No	YP-mAb-16533
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	TRPV4 VRL2 VROAC
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human TRPV4. AA range:461-510
Specificity	The antibody detects endogenous TRPV4 protein
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Osm 9 like TRP channel 4;Osm-9-like TRP channel 4;OTRPC4;TRP12;Vanilloid receptor-like channel 2;TRPV4;TRPV4 VRL2 VROAC;transient receptor potential cation channel;subfamily V;member 4; subfamily V; member 4
Observed Band	100kD
Calculated Molecular Weight	100kD
Cell Pathway	Cell membrane . Apical cell membrane ; Multi-pass membrane protein . Cell junction, adherens junction . Cell projection, cilium . Assembly of the putative homotetramer occurs primarily in the endoplasmic reticulum. . ; [Isoform 1]: Cell membrane . ; [Isoform 5]: Cell membrane . ; [Isoform 2]: Endoplasmic reticulum . ; [Isoform 4]: Endoplasmic reticulum . ; [Isoform 6]: Endoplasmic reticulum .
Tissue Specificity	Found in the synoviocytes from patients with (RA) and without (CTR) rheumatoid arthritis (at protein level).
Function	disease:Defects in TRPV4 are the cause of brachyolmia type 3 [MIM:113500]; also called brachyrachia. The brachyolmias constitute a clinically and genetically heterogeneous group of skeletal dysplasias characterized by a short trunk, scoliosis and mild short stature. Type 3 brachyolmia is an autosomal dominant form with severe kyphoscoliosis and flattened, irregular cervical vertebrae., function:Non-selective calcium permeant cation channel probably involved in



osmotic sensitivity and mechanosensitivity. Activation by exposure to hypotonicity within the physiological range exhibits an outward rectification. Also activated by low pH, citrate and phorbol esters. Increase of intracellular Ca^{2+} potentiates currents. Channel activity seems to be regulated by a calmodulin-dependent mechanism with a negative feedback mechanism.,similarity:Belongs to the transient receptor family. TrpV subfamily

Background

transient receptor potential cation channel subfamily V member 4 (TRPV4) Homo sapiens This gene encodes a member of the OSM9-like transient receptor potential channel (OTRPC) subfamily in the transient receptor potential (TRP) superfamily of ion channels. The encoded protein is a Ca^{2+} -permeable, nonselective cation channel that is thought to be involved in the regulation of systemic osmotic pressure. Mutations in this gene are the cause of spondylometaphyseal and metatropic dysplasia and hereditary motor and sensory neuropathy type IIC. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2010],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using TRPV4 Monoclonal Antibody