



TRPV4 Rabbit mAb

Catalog No	YP-rAb-17765
Isotype	IgG
Reactivity	Human
Applications	WB,IF,IP,ELISA
Gene Name	TRPV4
Protein Name	Transient receptor potential cation channel subfamily V member 4
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:1000-1:5000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	TRPV4 ; VRL2 ; VROAC ; Transient receptor potential cation channel subfamily V member 4 ; TrpV4 ; Osm-9-like TRP channel 4 ; OTRPC4 ; Transient receptor potential protein 12 ; TRP12 ; Vanilloid receptor-like channel 2 ; Vanilloid receptor-like protein 2 ; VRL-2 ; Vanilloid receptor-related osmotically-activated channel ; VR-OAC
Observed Band	90-100kD
Calculated Molecular Weight	98kD
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.,similarity:Contains 3 ANK repeats.,subcellular location:Assembly of the putative homotetramer occurs primarily in the endoplasmic reticulum.,subunit:Homotetramer (Probable). Self-associates in a isoform-specific manner. Isoforms 1/A and 5/D but not isoform 2/B, 4/C and 6/E can oligomerize . Interacts with calmodulin. Interacts with Map7 and Src family Tyr protein kinases LYN, SRC, FYN, HCK, LCK and YES.,

Background

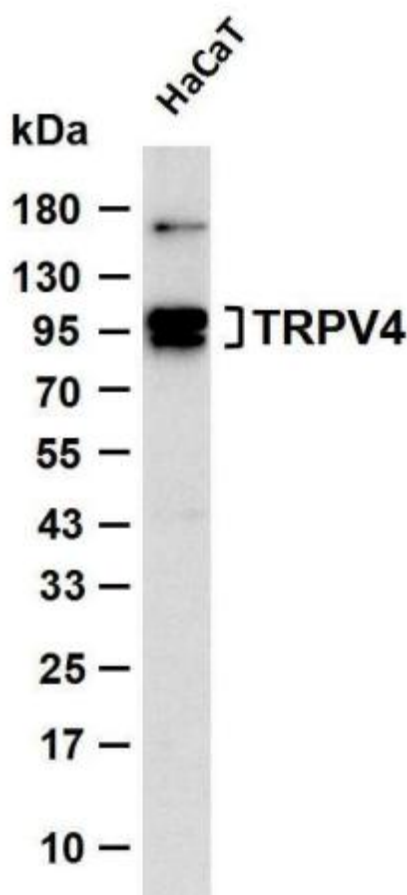
transient receptor potential cation channel subfamily V member 4(TRPV4) Homo sapiens This gene encodes a member of the OSM9-like transient receptor potential channel (OTRPC) subfamily in the transient receptor potential (TRP) superfamily of ion channels. The encoded protein is a Ca^{2+} -permeable, nonselective 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.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-TRPV4 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HaCaT Predicted band size: 98kDa Observed band size: 90-100kDa

