Product name:	TRPV4 Rabbit Polyclonal Antibody
Cat number:	ABN19330
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human TRPV4. AA range:417-466
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,ELISA 1:10000-1:20000
Molecular Weight:	98kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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 Ca2+-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],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.,