Immunotag™ TRPV4 Antibody

Antibody Specification

Catalog No.	ITA8365
Product Description	Immunotag™ TRPV4 Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	TRPV4
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IF/ICC,ELISA
Recommended Dilution	WB 1:1000-3000 IF/ICC 1:100-500
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human TRPV4
Specificity	TRPV4 Antibody detects endogenous levels of total TRPV4
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	TRPV4
Accession No.	Q9HBA0

Antibody Specification

Alternate Names	BCYM3; CMT2C; HMSN2C; osm 9 like TRP channel 4; Osm-9-like TRP channel 4; OSM9 like transient receptor potential channel 4; Osmosensitive transient receptor potential channel 4; OTRPC 4; OTRPC4; SMAL; SPSMA; SSQTL1; Transient receptor potential cation channel subfamily V member 4; Transient receptor potential protein 12; TRP 12; TRP12; TRPV 4; TrpV4; TRPV4_HUMAN; Vanilloid receptor like channel 2; Vanilloid receptor like protein 2; Vanilloid receptor related osmotically activated channel; Vanilloid receptor-like channel 2; Vanilloid receptor-like protein 2; Vanilloid receptor-related osmotically-activated channel; VR 4; VR OAC; VR-OAC; VR4; VRL 2; VRL-2; VRL2; VROAC;
Description	Non-selective calcium permeant cation channel involved in osmotic sensitivity and mechanosensitivity. Activation by exposure to hypotonicity within the physiological range exhibits an outward rectification (PubMed:18826956, PubMed:18695040). Also activated by heat, low pH, citrate and phorbol esters (PubMed:16293632, PubMed:18826956, PubMed:18695040, PubMed:25256292, PubMed:20037586, PubMed:21964574). Increase of intracellular Ca2+ potentiates currents. Channel activity seems to be regulated by a calmodulin-dependent mechanism with a negative feedback mechanism (PubMed:12724311, PubMed:18826956). Promotes cell-cell junction formation in skin keratinocytes and plays an important role in the formation and/or maintenance of functional intercellular barriers (By similarity). Acts as a regulator of intracellular Ca2+ in synoviocytes (PubMed:19759329). Plays an obligatory role as a molecular component in the nonselective cation channel activation induced by 4-alpha-phorbol 12,13-didecanoate and hypotonic stimulation in synoviocytes and also regulates production of IL-8 (PubMed:19759329). Together with PKD2, forms mechano- and thermosensitive channels in cilium (PubMed:18695040). Negatively regulates expression of PPARGC1A, UCP1, oxidative metabolism and respiration in adipocytes (By similarity). Regulates expression of chemokines and cytokines related to proinflammatory pathway in adipocytes (By similarity). Together with AQP5, controls regulatory volume decrease in salivary epithelial cells (By similarity). Required for normal development and maintenance of bone and cartilage (PubMed:26249260).
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	98 kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.