Datasheet for ABIN7043415

anti-ORAI3 antibody (Intracellular)

1 Image

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Overview

Quantity:	25 µL
Target:	ORAI3
Binding Specificity:	AA 28-42, Intracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ORAI3 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Orai3 Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)REFVHRGYLDLMGAS, corresponding to amino acid residues 28-42 of rat Orai3
Isotype:	IgG
Specificity:	Intracellular, N-terminus
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse,human - identical
Characteristics:	Anti-Orai3 Antibody is directed against an epitope of rat Orai3. Anti-Orai3 Antibody (ABIN7043415, ABIN7044030 and ABIN7044031) can be used in western blot analysis. It has

Product Details

	been designed to recognize Orai3 from human, rat, and mouse samples.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	ORAI3
Alternative Name:	ORAI3 (ORAI3 Products)
Background:	TMEM142C,In non-excitable cells, Ca2+ signaling plays a most important role in important cellular functions such as migration, proliferation and differentiation1. In such cells, Ca2+ enters via either non-selective cation channels such as TRPCs or through highly selective Ca2+ such as Ca2+ release-activated Ca2+ channels (CRAC channels) or store-operated Ca2+ entry channels (SOC channels), and the arachidonic acid-regulated Ca2+ channels (ARC channels)2.Orai channels are part of the molecular components involved in the Ca2+ entry described above. Three Orai channels have been described in mammalian cells: Orai1-3. These channels make up the pore forming unit of CRAC channels3. They are membrane proteins with four transmembrane domains and intracellular N- and C-termini. Orai1 and Orai3 share similar distribution and are expressed in the heart, brain, liver, spleen, lung, intestine, lymphoid organs, skin, and skeletal muscle. Expression of Orai2 is more limited and is found mainly in the brain and lower expression is detected in the lung, spleen and intestine3.CRAC channels have been for the most part identified as homotetramers of Orai1 interacting with endoplasmic reticulum located STIM1 that are activated by a depletion of intracellular Ca2+ 4. Orai3 was shown to emit store-operated Ca2+ entry (SOCE) currents along with STIM1/2 in breast cancer cells which are Estrogen Receptor positive (ER+), whereas Orai1/STIM1 are responsible for these currents in Estrogen Receptor negative (ER-) cells1. Furthermore, inhibition of Orai3 in these cells elicits cell cycle arrest and ultimately apoptosis (normal cells do not undergo apoptosis)5. ARC channels are composed of a heteropentameric organization of Orai1/Orai3 (in a 3:2 ratio) which interacts with the small fraction of plasma membrane localized STIM1. These channels are activated by low concentrations of arachidonic acid localized at the inner face of the plasma membrane6. Alternative names: Orai3, TMEM142C
Gene ID:	309000
NCBI Accession:	NM_152288
UniProt:	Q6AXR8

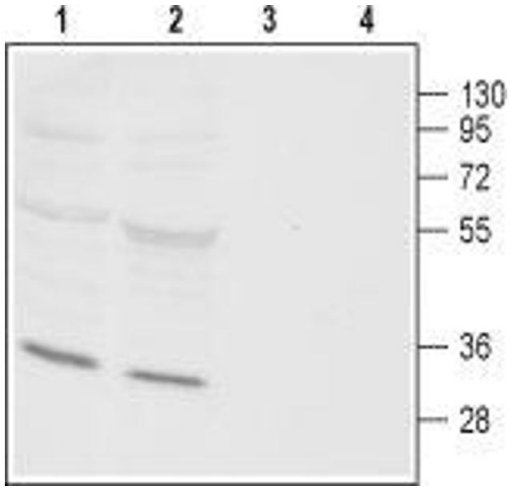
Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:800
Comment:	Cited Application: IFC Negative Control: (ABIN7236187) Blocking Peptide: (ABIN7236187)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Recosntitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



Western Blotting

Image 1. Western blot analysis of rat (lanes 1 and 3) and mouse (lanes 2 and 4) heart membranes: - 1,2. Anti-Orai3 Antibody (ABIN7043415, ABIN7044030 and ABIN7044031), (1:800).3,4. Anti-Orai3 Antibody, preincubated with Orai3 Blocking Peptide (#BLP-CC065).