

Datasheet for ABIN7043465
anti-KCNN4 antibody (Intracellular)



[Go to Product page](#)

1 Image

Overview

Quantity:	25 µL
Target:	KCNN4
Binding Specificity:	AA 350-363, Intracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KCNN4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunochromatography (IC), Immunoprecipitation (IP)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to KCNN4 (KCa3.1, SK4) Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: RQVRLKHRKLREQV(C), corresponding to amino acid residues 350-363 of rat KCNN4
Isotype:	IgG
Specificity:	Intracellular, C-terminal domain
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse,human,pig - identical
Characteristics:	Anti-KCNN4 (KCa3.1, SK4) Antibody (ABIN7043465, ABIN7044979 and ABIN7044980) is a

Product Details

highly specific antibody directed against an epitope of the rat protein. The antibody can be used in western blot analysis, immunocytochemistry, immunohistochemistry, and immunoprecipitation applications. It has been designed to recognize KCNN4 from human, rat, and mouse samples.

Purification: Affinity purified on immobilized antigen.

Target Details

Target: KCNN4

Alternative Name: KCNN4 ([KCNN4 Products](#))

Background: IKCa1, IK1, Intermediate conductance Ca²⁺-activated K⁺ channel protein 4, Gardos channel, KCa3.1 (KCNN4, SK4) is a member of the Ca²⁺ activated K⁺ channel family that shares the characteristic of being activated by intracellular Ca²⁺. The channel has an intermediate conductance, is voltage insensitive and is activated by Ca²⁺ in the submicromolar range. The channel has a similar topology to that of KV channels, that is, six transmembrane domains and intracellular N- and C-termini. KCa3.1 is widely expressed in epithelial, endothelial and cells of hematopoietic origin. In erythrocytes (red blood cells) it has been identified as the molecular correlate of the so-called Gardos channel. The functional role of the channel is to set the cell membrane potential at negative values so as to aid in the electrochemical transport of other ions such as Cl⁻ and Ca²⁺. Indeed, KCa3.1 has a key role in sustaining the Ca²⁺ influx in activated T lymphocytes and in regulating Cl⁻ secretion from colon epithelium. Therefore, specific blockers of the KCa3.1 channel have been proposed for the treatment of several diseases including autoimmune diseases, secretory diarrhea and sickle cell anemia.

Alternative names: KCNN4 (KCa3.1, SK4), IKCa1, IK1, Intermediate conductance Ca²⁺-activated K⁺ channel protein 4, Gardos channel

Gene ID: 65206

NCBI Accession: [NM_002250](#)

UniProt: [Q9QYW1](#)

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: 1:200

Application Details

Comment:

Cited Application: IP|IHC|ICC

Negative Control: (ABIN7236353)

Blocking Peptide: (ABIN7236353)

Restrictions:

For Research Use only

Handling

Format:

Lyophilized

Reconstitution:

0.2 mL double distilled water (DDW).

Concentration:

1 mg/mL

Buffer:

PBS pH 7.4

Storage:

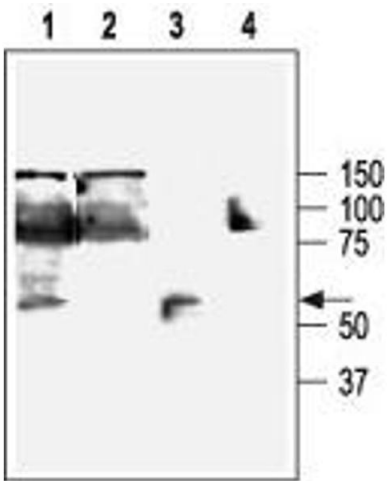
4 °C,-20 °C

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 KCa3.1-transfected HEK-293 (lanes 1 and 3) and Human K562 chronic myelogenous leukemia (lanes 2 and 4) cells: - 1,2. Anti-KCNN4 (KCa3.1, SK4) Antibody (ABIN7043465, ABIN7044979 and ABIN7044980), (1:200). 3,4. Anti-KCNN4 (KCa3.1, SK4) Antibody, preincubated with KCNN4/KCa3.1 Blocking Peptide (#BLP-PC064).