

Datasheet for ABIN7043494  
**anti-KCNMA1 antibody (Intracellular)**



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3 Images

## Overview

Quantity:	25 µL
Target:	KCNMA1
Binding Specificity:	AA 1184-1200, Intracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KCNMA1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF), Immunochromatography (IC)

## Product Details

Purpose:	A Rabbit Polyclonal Antibody to KCNMA1 (KCa1.1) Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)STANRPNRPKSRESRDK, corresponding to amino acid residues 1184-1200 of mouse KCNMA1
Isotype:	IgG
Specificity:	Intracellular, C-terminal domain
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Rat - identical, human,bovine,chicken,dog - 16,17 amino acid residues identical
Characteristics:	Anti-KCNMA1 (KCa1.1) (1184-1200) Antibody (ABIN7043494, ABIN7045002 and

## Product Details

ABIN7045003)) is a highly specific antibody directed against an epitope of the mouse protein. The antibody can be used in western blot, immunocytochemistry, immunohistochemistry, and immunoprecipitation applications. It has been designed to recognize KCNMA1 from human, rat, and mouse samples.

Purification: Affinity purified on immobilized antigen.

Grade: KO Validated

## Target Details

Target: KCNMA1

Alternative Name: KCNMA1 ([KCNMA1 Products](#))

Background: Large conductance calcium-activated potassium channel subfamily M subunit alpha-1, BKCa alpha, Maxi K+, Slo1, KCa1.1 (KCNMA1, BKCa, Maxi K+ or slo) is part of a structurally diverse group of K+ channels that are activated by an increase in intracellular Ca<sup>2+</sup>. KCa1.1 shows a large single channel conductance when recorded electrophysiologically and hence its name. It differs from the rest of the subfamily members in that it can be activated by both an increase in intracellular Ca<sup>2+</sup> and by membrane depolarization. KCa1.1 is expressed in virtually all cell types where it causes hyperpolarization and helps to connect intracellular Ca<sup>2+</sup> signaling pathways and membrane excitability. Indeed, KCa1.1 channels have a crucial role in smooth muscle contractility, neuronal spike shaping and neurotransmitter release.

Alternative names: KCNMA1 (KCa1.1), Large conductance calcium-activated potassium channel subfamily M subunit alpha-1, BKCa alpha, Maxi K+, Slo1

Gene ID: 16531

NCBI Accession: [NM\\_002247](#)

UniProt: [Q08460](#)

Pathways: [Regulation of Hormone Metabolic Process](#), [Sensory Perception of Sound](#)

## 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: 1:500

Comment: Cited Application: IP|IHC|ICC

Application Details

	Negative Control: BLP-PC107
	Blocking Peptide: BLP-PC107
Restrictions:	For Research Use only

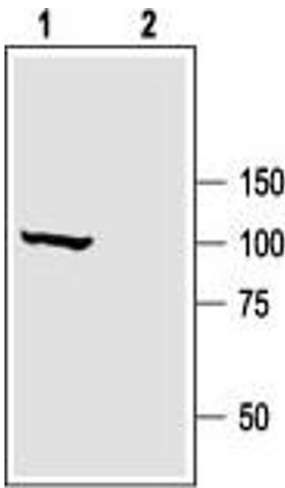
Handling

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



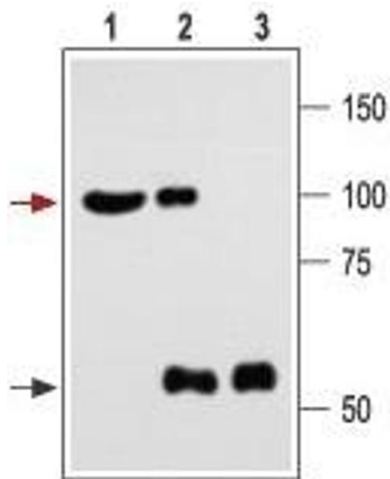
**Western Blotting**

**Image 1.** Western blot analysis of rat brain membranes: -  
1. Anti-KCNMA1 (KCa1.1) (1184-1200) Antibody (ABIN7043494, ABIN7045002 and ABIN7045003), (1:500). 2. Anti-KCNMA1 (KCa1.1) (1184-1200) Antibody, preincubated with KCNMA1/KCa1.1 (1184-1200) Blocking Peptide (#BLP-PC107).



#### Immunohistochemistry

**Image 2.** Expression of KCNMA1 in rat penis - Immunohistochemical staining of rat penis transversal section using Anti-KCNMA1 (KCa1.1) (1184-1200) Antibody (ABIN7043494, ABIN7045002 and ABIN7045003). Strong and specific immunostaining is evident in both corpus cavernosum smooth muscle cells (blue arrow) and in the muscular layer of the penis artery (green arrow). Universal Immuno-alkaline-phosphatase Polymer followed by New Fuchsin Substrate (histofine, Nichirei Corp.) was used for the colour reaction. Hematoxyllin is used as the counterstain.



#### Immunoprecipitation

**Image 3.** Immunoprecipitation of rat brain lysate: - 1. Brain lysate.2. Brain lysate immunoprecipitated with Anti-KCNMA1 (KCa1.1) (1184-1200) Antibody (ABIN7043494, ABIN7045002 and ABIN7045003), (4 μg).3. Brain lysate immunoprecipitated with pre-immune rabbit serum.The upper arrow indicates the KCNMA1 channel while the lower arrow indicates the IgG heavy chain.Western blot analysis was performed with Anti-KCNMA1 (KCa1.1) (1184-1200) Antibody.