

## Datasheet for 600-401-E14

**Potassium Channel, Voltage-Gated, Kv3.1 phospho S503 Antibody****Overview**

<b>Description:</b>	Anti-Potassium Channel, Voltage-Gated, Kv3.1 pS503 (RABBIT) Antibody - 600-401-E14
<b>Item No.:</b>	600-401-E14
<b>Size:</b>	100 µL
<b>Applications:</b>	IHC, WB
<b>Reactivity:</b>	Mouse, Rat
<b>Host Species:</b>	Rabbit

**Product Details**

<b>Background:</b>	Potassium Channel, Voltage Gated Kv2.2 pS503 Antibody detects Voltage Gated Potassium Channel Kv2.2 pS503 protein. Voltage-gated K <sup>+</sup> channels are important determinants of neuronal membrane excitability. Moreover, differences in K <sup>+</sup> channel expression patterns and densities contribute to the variations in action potential waveforms and repetitive firing patterns evident in different neuronal cell types. The Kv3.1 potassium channel is expressed at high levels in neurons that characteristically fire rapid trains of action potentials. Anti-Potassium Channel, Voltage Gated Kv2.2 pS503 Antibody is ideal for investigators involved in Neuroscience and Cell Signaling research.
<b>Synonyms:</b>	Potassium voltage-gated channel subfamily C member 1, NGK2, RAW2, Voltage-gated potassium channel subunit Kv4
<b>Host Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

**Target Details**

<b>Gene Name:</b>	Kcnc1
<b>Reactivity:</b>	Mouse, Rat
<b>PTM Specificity:</b>	Phosphorylation
<b>Immunogen Type:</b>	Conjugated Peptide

<b>Immunogen:</b>	Anti-Potassium Channel, Voltage-Gated Kv3.1 pS503 Antibody was produced by repeated immunizations with a synthetic phospho-peptide corresponding to amino acid residues surrounding Ser503.
<b>Purity/Specificity:</b>	Anti-Potassium Channel, Voltage Gated Kv2.2 pS5003 Antibody is directed against phosphorylated rat Voltage Gated Potassium Channel Kv2.2. Potassium Channel, Voltage-Gated Kv3.1 pS503 antibodies are affinity purified from monospecific antiserum by immunoaffinity purification. Reactivity is expected from mouse. Cross reactivity with Kv2.2 from other species has not been determined.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P25122</a></li><li>• <a href="#">GeneID - 25327</a></li><li>• <a href="#">UniProtKB - P25122.1</a></li></ul>

## Application Details

<b>Tested Applications:</b>	IHC, WB
<b>Application Note:</b>	Anti-Potassium Channel, Voltage-Gated Kv3.1 pS503 Antibody is tested for use in Western Blotting and IHC. Expect a band of approximately 100kDa in size corresponding to Kv3.1 voltage-gated potassium channel protein phosphorylated at Ser503 in the appropriate cell lysate or extract. Specific conditions for reactivity should be optimized by the end user.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>IHC:</b>	1:1000
<b>WB:</b>	1:1000

## Formulation

<b>Physical State:</b>	Liquid
<b>Buffer:</b>	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
<b>Stabilizer:</b>	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

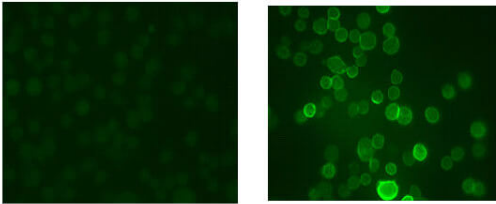
## Shipping & Handling

<b>Shipping Condition:</b>	Dry Ice
<b>Storage Condition:</b>	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.

**Expiration:** Expiration date is one (1) year from date of receipt.

## Images

Anti-Phospho Ser<sup>503</sup> Kv3.1, Voltage-Gated Potassium Channel



**IHC staining** of medial nucleus of the trapezoid body (MNTB) cells with the phospho-Ser<sup>503</sup> Kv3.1 subunit antibody. The left panel shows control cells. The right panel shows cells that have been exposed to the protein kinase C activator PMA.

### Immunohistochemistry

Immunohistochemistry of Rabbit anti-Potassium Channel, Voltage-Gated, Kv3.1 pS503 antibody. Tissue: trapezoid body (MNTB) cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Potassium Channel, Voltage-Gated, Kv3.1 pS503 antibody at 1:1000 for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Potassium Channel, Voltage-Gated, Kv3.1 pS503 is in the medial nucleus. Staining: The left panel shows control cells. The right panel shows cells that have been exposed to the protein kinase C activator PMA.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.