

Product datasheet for **AP08729PU-N**

Kcnc1 pSer503 Rabbit Polyclonal Antibody

Product data:

| | |
|-----------------------|---|
| Product Type: | Primary Antibodies |
| Applications: | IF, IHC, WB |
| Recommended Dilution: | Dot Blot: 1/1000. Western blot: 1/1000. Immunofluorescence. Immunohistochemistry on Frozen Sections: 1/1000. |
| Reactivity: | Mouse, Rat |
| Host: | Rabbit |
| Isotype: | IgG |
| Clonality: | Polyclonal |
| Immunogen: | Phosphopeptide corresponding to amino acid residues surrounding the phospho-Ser503 of KCNC1 conjugated to keyhole limpet hemocyanin (KLH). |
| Specificity: | This antibody recognizes the ~100k KCNC1 (Kv3.1) protein phosphorylated at Ser503 in Rat brain extracts. |
| Formulation: | 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% Glycerol. State: Aff - Purified State: Liquid purified Ig fraction. |
| Purification: | Sequential Chromatography on phospho- and dephosphopeptide affinity columns. |
| Conjugation: | Unconjugated |
| Storage: | Store the antibody undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing. |
| Stability: | Shelf life: one year from despatch. |
| Gene Name: | potassium voltage-gated channel subfamily C member 1 |
| Database Link: | Entrez Gene 25327 Rat P25122 |



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Background:

Voltage-gated K⁺ channels are important determinants of neuronal membrane excitability. Moreover, differences in K⁺ channel expression patterns and densities contribute to the variations in action potential waveforms and repetitive firing patterns evident in different neuronal cell types (Maletic-Savatic et al., 1995; Pongs, 1999; Blaine and Ribera, 1998; Burger and Ribera, 1996). The Kv3.1 potassium channel is expressed at high levels in neurons that characteristically fire rapid trains of action potentials (Gan et al., 1999). Particularly high levels of this channel are found in neurons of the auditory brainstem. These neurons appear to participate in neural circuits that determine the intensity and timing of auditory stimuli and use this information to determine the location of sounds in space (von Hehn et al., 2004).

Synonyms:

Potassium voltage-gated channel subfamily C member 1, Voltage-gated potassium channel subunit Kv3.1, Kv4, NGK2

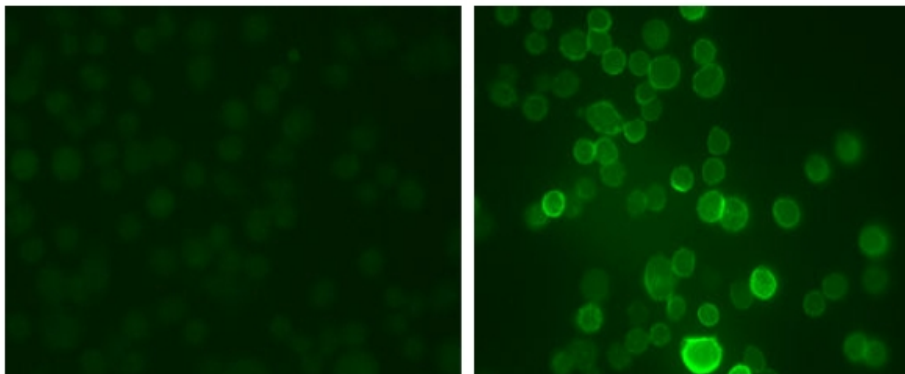
Product images:


Figure 1. Immunohistochemistry staining of medial nucleus of the trapezoid body (MNTB) cells with the phospho-Ser503 Kv3.1 subunit antibody. Left: Control cells. Right: Cells that have been exposed to the protein kinase C activator PMA.