

## Anti-Kv4.3 K<sup>+</sup> Channel [K75/41] Standard Size Ab02117-8.4

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors. Variable region sequences were determined by Dr. James Trimmer at the University of California, Davis, as supported by National Institutes of Health BRAIN Initiative award U24 NS109113.

This chimeric rat antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Rat IgG2b, Fc Silent™, Kappa

**Clone Number:** K75/41

**Alternative Name(s) of Target:** K75/41R; Potassium voltage-gated channel subfamily D member 3; Kcnd3

**UniProt Accession Number of Target Protein:** Q62897

**Published Application(s):** IB, IHC

**Published Species Reactivity:** Rat, Xenopus, Human, Mouse

**Immunogen:** This antibody was raised by immunising BALB/c mice with a fusion protein consisting of the cytoplasmic C-terminus (amino acids 415-636) of rat Kv4.3.

**Specificity:** This antibody is specific for Kv4.3. It does not cross-react with Kv4.2.

**Application Notes:** The specificity of this antibody has been confirmed in immunohistochemical analysis; while this antibody stains adult rat hippocampus sections (Andrews et al, 2019; PMID:30667360), brain sections from Kv4.3<sup>-/-</sup> mice remain blank (Burkhalter et al, 2006). This antibody has been used in immunoblot analysis of rat, mouse and frog brain membranes (Andrews et al, 2019; PMID:30667360). Additionally, this antibody has been used to assess Kv4.3 expression in mouse primary visual and primary somatosensory cortex through immunofluorescence imaging (Burkhalter et al, 2006).

**Antibody First Published in:** Burkhalter et al. Differential Expression of IA Channel Subunits Kv4.2 and Kv4.3 in Mouse Visual Cortical Neurons and Synapses Journal of Neuroscience 22 November 2006, 26 (47) 12274-12282 PMID:17122053

**Note on publication:** Describes the original use of this antibody.

## Product Form

**Size:**

200 µg Purified antibody.

**Purification:** Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.