



# Kv1.3 (phospho Tyr187) rabbit pAb

Cat No.:ES5988

For research use only

## Overview

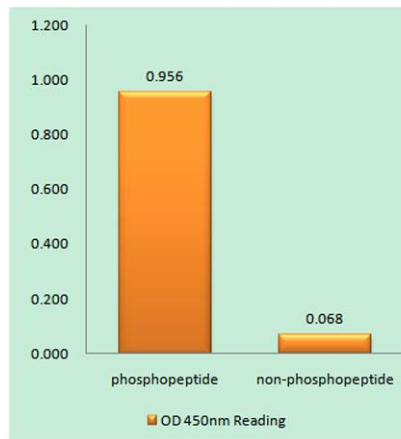
Product Name	Kv1.3 (phospho Tyr187) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human Kv1.3/KCNA3 around the phosphorylation site of Tyr135. AA range:101-150
Specificity	Phospho-Kv1.3 (Y187) Polyclonal Antibody detects endogenous levels of Kv1.3 protein only when phosphorylated at Y187.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Potassium voltage-gated channel subfamily A member 3
Gene Name	KCNA3
Cellular localization	Cell membrane ; Multi-pass membrane protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	58kD
Human Gene ID	3738
Human Swiss-Prot Number	P22001
Alternative Names	KCNA3; HGK5; Potassium voltage-gated channel subfamily A member 3; HGK5; HLK3; HPCN3; Voltage-gated K(+) channel HuKIII; Voltage-gated



## Background

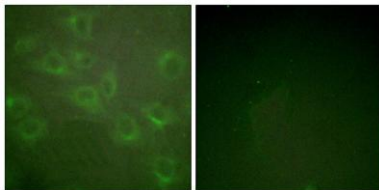
### potassium channel subunit Kv1.3

Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in *Drosophila*, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member contains six membrane-spanning domains with a shaker-type repeat in the fourth segment. It belongs to the delayed rectifier class, members of which allow nerve cells to efficiently repolarize following an action potential. It plays an essential role in T-cell proliferation and



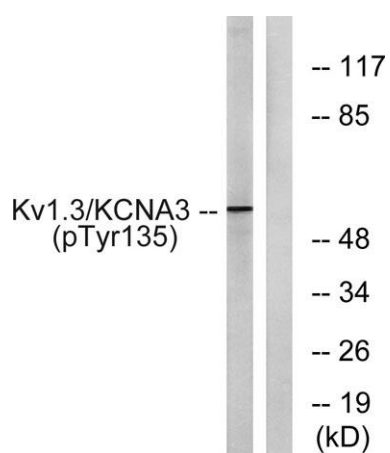
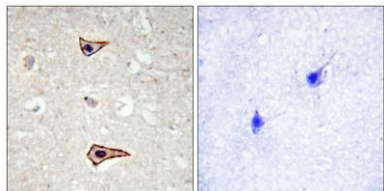
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Kv1.3/KCNA3 (Phospho-Tyr135) Antibody

Immunofluorescence analysis of HUVEC cells, using Kv1.3/KCNA3 (Phospho-Tyr135) Antibody. The picture on the right is blocked with the phospho peptide.





Immunohistochemistry analysis of paraffin-embedded human brain, using Kv1.3/KCNA3 (Phospho-Tyr135) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with starved 24h, using Kv1.3/KCNA3 (Phospho-Tyr135) Antibody. The lane on the right is blocked with the phospho peptide.

