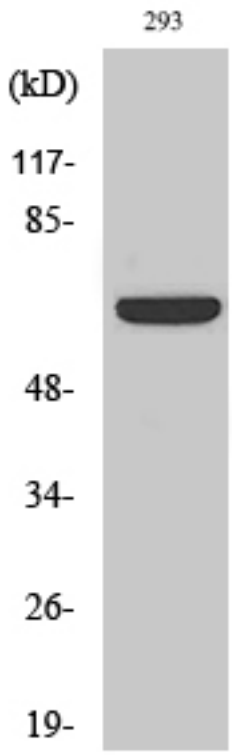
Kv1.3 Polyclonal Antibody

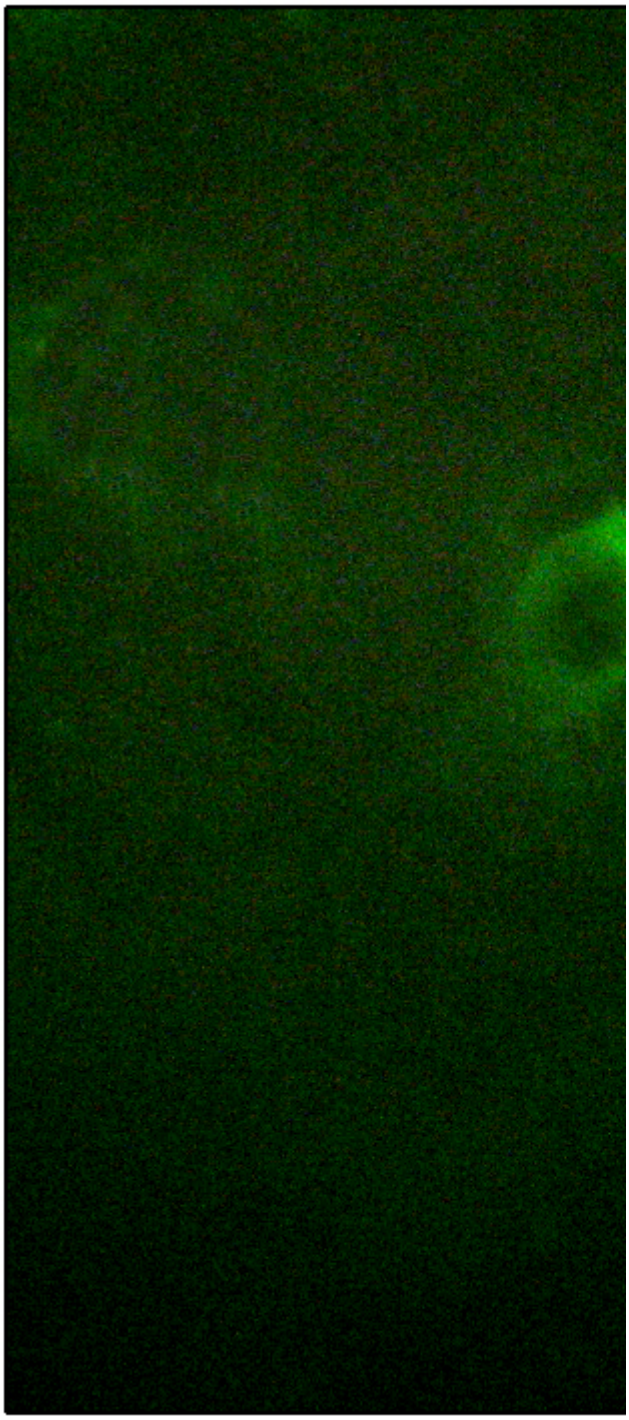
Catalog No	BYab-32056
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	KCNA3
Protein Name	Potassium voltage-gated channel subfamily A member 3
Immunogen	The antiserum was produced against synthesized peptide derived from human Kv1.3/KCNA3. AA range:101-150
Specificity	Kv1.3 Polyclonal Antibody detects endogenous levels of Kv1.3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	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.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	KCNA3; HGK5; Potassium voltage-gated channel subfamily A member 3; HGK5; HLK3; HPCN3; Voltage-gated K(+) channel HuKIII; Voltage-gated potassium channel subunit Kv1.3
Observed Band	
Cell Pathway	Cell membrane ; Multi-pass membrane protein.
Tissue Specificity	Blood,Brain,Lymphocyte,Skeletal muscle,
Function	caution:It is uncertain whether Met-1 or Met-53 is the initiator.,domain:The N-terminus may be important in determining the rate of inactivation of the channel while the tail may play a role in modulation of channel activity and/or targeting of the channel to specific subcellular compartments.,domain:The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.,function:Mediates the voltage-dependent potassium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the

	protein forms a potassium-selective channel through which potassium ions may pass in accordance with their electrochemical gradient.,sequence caution:Translation N-terminally extended.,similarity:Belongs to the potassium channel family. A (Shaker) subfamily.,subunit
Background	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
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

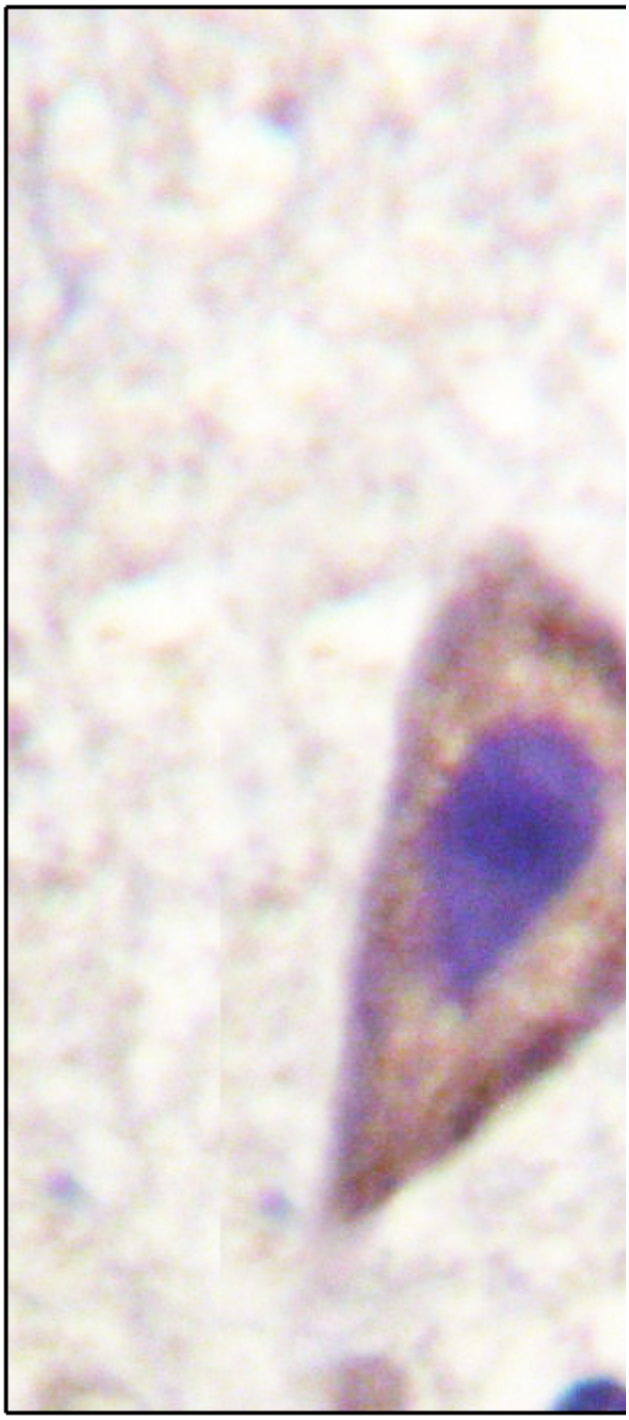
Products Images



Western Blot analysis of various cells using Kv1.3 Polyclonal Antibody diluted at 1:500



Immunofluorescence analysis of HUVEC cells, using Kv1.3/KCNA3 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Kv1.3/KCNA3 Antibody. The picture on the right is blocked with the synthesized peptide.