

Rabbit Kv1. 1 potassium channel/KCNA1 Polyclonal Antibody | anti-KCNA1 antibody

Anti-Kv1. 1 potassium channel/KCNA1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125622	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

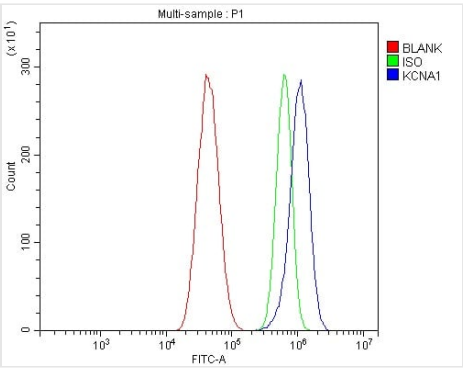
PRODUCT SYNONYMS

Kv1. 1 potassium channel/KCNA1; Polyclonal Antibody; Anti-Kv1. 1 potassium channel/KCNA1 Antibody; Potassium voltage-gated channel subfamily A member 1; Voltage-gated K(+) channel HuK1; Voltage-gated potassium channel HBK1; Voltage-gated potassium channel subunit Kv1. 1; KCNA1

; potassium voltage-gated channel subfamily A member 1; anti-KCNA1 antibody

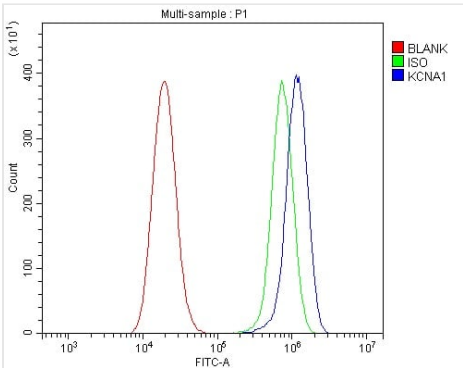
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Kv1. 1 potassium channel/KCNA1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-KCNA1 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived human Kv1. 1 potassium channel/KCNA1 recombinant protein (Position: M1-V495).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



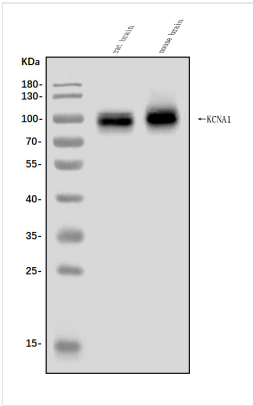
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of U87 cells using anti-KCNA1 antibody (AAA125622).Overlay histogram showing U87 cells stained with AAA125622 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-KCNA1 Antibody (AAA125622, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of U20S cells using anti-KCNA1 antibody (AAA125622).Overlay histogram showing U20S cells stained with AAA125622 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-KCNA1 Antibody (AAA125622, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of KCNA1 using anti-KCNA1 antibody (AAA125622).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.Lane 1: rat brain tissue lysatesLane 2: mouse brain tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-KCNA1 antigen affinity purified polyclonal antibody (Catalog # AAA125622) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for KCNA1 at approximately 90KD. The expected band size for KCNA1 is at 90KD.

ADDITIONAL INFORMATION

Related Product Information for anti-KCNA1 antibody	Potassium voltage-gated channel subfamily A member 1, also known as Kv1. 1, is a shaker related voltage-gated potassium channel that in humans is encoded by the KCNA1 gene. It is mapped to 12p13. 32. The protein functions as a potassium selective channel through which the potassium ion may pass through in consensus with the electrochemical gradient. The N-terminus of the channel is associated with beta subunits that can modify the inactivation properties of the channel as well as affect expression levels. The C-terminus of the channel is complexed to a PDZ domain protein that is responsible for channel targeting.
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References	1. Albrecht B, Weber K, Pongs O (1995). "Characterization of a voltage-activated K-channel gene cluster on human chromosome 12p13". Recept. Channels 3 (3): 213-20. 2. Curran ME, Landes GM, Keating MT (1992). "Molecular cloning, characterization, and genomic localization of a human potassium channel gene". Genomics 12 (4): 729-37. 3. "Entrez Gene: KCNA1 potassium voltage-gated channel".
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NCBI AND UNIPROT INFORMATION

NCBI GI #	119395748
NCBI GeneID	3736
NCBI Accession #	NP_000208.2
NCBI GenBank Nucleotide #	NM_000217.2
UniProt Accession #	Q09470; Q3MIQ9; A6NM83
Molecular Weight	56,466 Da
NCBI Official Full Name	potassium voltage-gated channel subfamily A member 1
NCBI Official Synonym Full Names	potassium voltage-gated channel, shaker-related subfamily, member 1 (episodic ataxia with myokymia)
NCBI Official Symbol	KCNA1
NCBI Official Synonym Symbols	EA1; MK1; AEMK; HBK1; HUK1; MBK1; RBK1; KV1.1
NCBI Protein Information	potassium voltage-gated channel subfamily A member 1; voltage-gated K(+) channel HuK1; voltage-gated potassium channel HBK1; voltage-gated potassium channel subunit Kv1.1
UniProt Protein Name	Potassium voltage-gated channel subfamily A member 1
UniProt Gene Name	KCNA1
UniProt Entry Name	KCNA1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/kv1-1-potassium-channel-kcna1-antibody-direct-elisa-flow-cytometry-western-blot-elisa/125622>