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Kv1.6 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54765

Specification

Kv1.6 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	P17658
Reactivity	**Rat, Pig**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**59 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human Kv1.6**
Epitope Specificity	**301-400/529**
Isotype	**IgG**
Purity affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Membrane; Multi-pass membrane protein.**
SIMILARITY	**Belongs to the potassium channel family. A (Shaker) (TC 1.A.1.2) subfamily. Kv1.6/KCNA6 sub-subfamily.**
SUBUNIT	**Heterotetramer of potassium channel proteins.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
Voltage-gated K+ channels in the plasma membrane control the repolarization and the frequency of action potentials in neurons, muscles, and other excitable cells. The KV gene family encodes more than 30 genes that comprise the subunits of the K+ channels, and they vary in their gating and permeation properties, subcellular distribution, and expression patterns. Functional KV channels assemble as tetramers consisting of pore-forming alpha-subunits (KV alpha), which include the KV1, KV2, KV3, and KV4 proteins, and accessory or KV beta subunits that modify the gating properties of the coexpressed KV alpha subunits. Differences exist in the patterns of trafficking, biosynthetic processing and surface expression of the major KV1 subunits (KV1.1, KV1.2, KV1.4, KV1.5 and KV1.6) expressed in rat and human brain, suggesting that the individual protein subunits are highly regulated to control for the assembly and formation of functional neuronal channels.

Kv1.6 Polyclonal Antibody - Additional Information

Gene ID 3742

Other Names

Potassium voltage-gated channel subfamily A member 6, Voltage-gated potassium channel HBK2, Voltage-gated potassium channel subunit Kv1.6, KCNA6

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

Kv1.6 Polyclonal Antibody - Protein Information

Name KCNA6

Function
Voltage-gated potassium channel that mediates transmembrane potassium transport in excitable membranes. Forms tetrameric potassium- selective channels through which potassium ions pass in accordance with their electrochemical gradient (PubMed:14575698, PubMed:2347305). The channel alternates between opened and closed conformations in response to the voltage difference across the membrane (PubMed:14575698, PubMed:2347305). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNA1, KCNA2, KCNA4, KCNA6, and possibly other family members as well; channel properties depend on the type of alpha subunits that are part of the channel (By similarity). Channel properties are modulated by cytoplasmic beta subunits that regulate the subcellular location of the alpha subunits and promote rapid inactivation (By similarity). Homotetrameric channels display rapid activation and slow inactivation (PubMed:2347305).

Cellular Location
Cell membrane; Multi-pass membrane protein

Kv1.6 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Kv1.6 Polyclonal Antibody - Images

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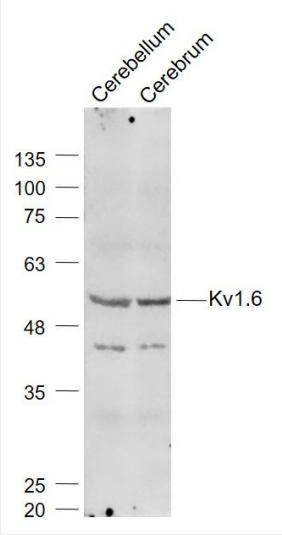
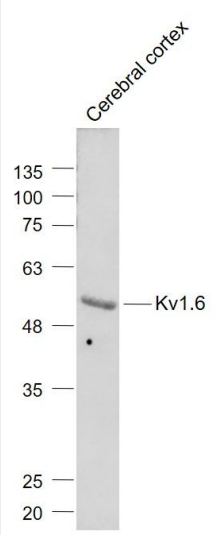


Sample:
Cerebellum (Mouse) Lysate at 40 ug
Cerebrum (Mouse) Lysate at 40 ug
Primary: Anti- Kv1.6 (bs-12184R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 59 kD
Observed band size: 59 kD



Sample:
Cerebral cortex (Mouse) Lysate at 40 ug
Primary: Anti- Kv1.6 (bs-12184R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 59 kD
Observed band size: 59 kD