

Product datasheet for **AP10551PU-N**

Kv4.3 (KCND3) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	ELISA. Western Blot: 1/200-1/2000. Immunofluorescence: 1/50-1/200. Immunohistochemistry: 1/50-1/200.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide derived from N-term domain of KCND3 protein
Specificity:	This antibody reacts with 73 kDa KCND3 protein.
Formulation:	0.1M Tris, 0.1M Glycine and 2% Sucrose State: Purified State: Lyophilized purified powder Preservative: None
Reconstitution Method:	Restore in distilled water.
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at -20°C. Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	potassium voltage-gated channel subfamily D member 3
Database Link:	Entrez Gene 3752 Human Q9UK17



[View online »](#)

Background:

Ion channels are integral membrane proteins that help establish and control the small voltage gradient across the plasma membrane of living cells by allowing the flow of ions down their electrochemical gradient. They are present in the membranes that surround all biological cells because their main function is to regulate the flow of ions across this membrane. Whereas some ion channels permit the passage of ions based on charge, others conduct based on a ionic species, such as sodium or potassium. Furthermore, in some ion channels, the passage is governed by a gate which is controlled by chemical or electrical signals, temperature, or mechanical forces. There are a few main classifications of gated ion channels. There are voltage- gated ion channels, ligand- gated, other gating systems and finally those that are classified differently, having more exotic characteristics. The first are voltage- gated ion channels which open and close in response to membrane potential. These are then separated into sodium, calcium, potassium, proton, transient receptor, and cyclic nucleotide-gated channels; each of which is responsible for a unique role. Ligand-gated ion channels are also known as ionotropic receptors, and they open in response to specific ligand molecules binding to the extracellular domain of the receptor protein. The other gated classifications include activation and inactivation by second messengers, inward-rectifier potassium channels, calcium-activated potassium channels, two-pore-domain potassium channels, light-gated channels, mechano-sensitive ion channels and cyclic nucleotide-gated channels. Finally, the other classifications are based on less normal characteristics such as two-pore channels, and transient receptor potential channels. Potassium voltage-gated channel subfamily D member 3 (also known as Kv4.3) is a protein that in humans is encoded by the KCND3 gene. It contributes to the cardiac transient outward potassium current, the main contributing current to the repolarizing phase 1 of the cardiac action potential.

Synonyms:

Potassium voltage-gated channel subfamily D member 3, Voltage-gated potassium channel subunit Kv4.3