10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Kcnd1 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10798

Product Information

Application	WB
Primary Accession	Q03719
Other Accession	NM_008423, NP_032449
Reactivity	Human, Mouse, Rat, Rabbit, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71698

Additional Information

Gene ID	16506
Alias Symbol	1110037K09Rik, Kca2-1, Kv4.1, Shal, mShal1
Other Names	Potassium voltage-gated channel subfamily D member 1, Voltage-gated potassium channel subunit Kv4.1, mShal, Kcnd1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Kcnd1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Kcnd1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

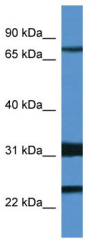
Name	Kcnd1 {ECO:0000312|MGI:MGI:96671}
Function	A-type voltage-gated potassium channel that mediates transmembrane potassium transport in excitable membranes in the brain (PubMed:28560311). Mediates A-type current I(SA) in suprachiasmatic nucleus (SCN) neurons (PubMed:28560311). Exhibits a low-threshold A- type current with a hyperpolarized steady-state inactivation midpoint and the recovery process was steeply voltage-dependent, with recovery being markedly faster at more negative potentials (PubMed:2034678). May regulates repetitive firing rates in the suprachiasmatic nucleus (SCN) neurons and circadian rhythms in neuronal excitability and behavior (PubMed:28560311). Contributes to the regulation of the circadian rhythm of

action potential firing in suprachiasmatic nucleus neurons, which regulates the circadian rhythm of locomotor activity (PubMed:28560311). The regulatory subunit KCNIP1 modulates the kinetics of channel inactivation, increases the current amplitudes and accelerates recovery from inactivation, shifts activation in a depolarizing direction (PubMed:11423117). The regulatory subunit DPP10 decreases the voltage sensitivity of the inactivation channel gating (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q9NZV8}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9NZV8}

Images



WB Suggested Anti-Kcnd1 Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Spleen