

# **Product datasheet for TA388324**

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### **KCNAB1 Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IF, IHC, WB

Recommended Dilution: Recommended dilution: WB:1:500-1:5000, IHC:1:200-1:500, IF:1:50-1:200

**Reactivity:** Mouse, Human

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: Recombinant Human Voltage-gated potassium channel subunit beta-1 protein (287-401AA)

Formulation: Preservative: 0.03% Proclin 300

Constituents: 50% Glycerol, 0.01M PBS, pH 7.4

**Concentration:** lot specific

**Purification:** >95%, Protein G purified

**Conjugation:** Unconjugated

**Storage:** Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

**Stability:** 1 year from dispatch.

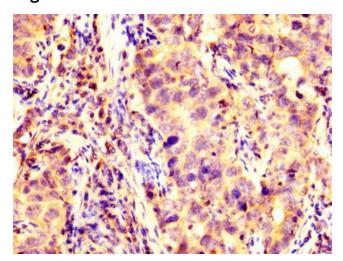
Database Link: Q14722



#### Background:

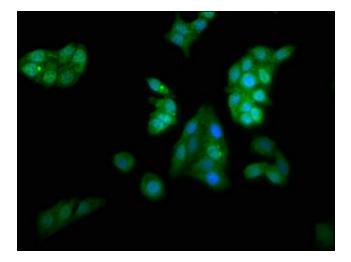
Cytoplasmic potassium channel subunit that modulates the characteristics of the channelforming alpha-subunits (PubMed:7499366, PubMed:7603988, PubMed:17156368, PubMed:17540341, PubMed:19713757). Modulates action potentials via its effect on the pore-forming alpha subunits (By similarity). Promotes expression of the poreforming alpha subunits at the cell membrane, and thereby increases channel activity (By similarity). Mediates closure of delayed rectifier potassium channels by physically obstructing the pore via its N-terminal domain and increases the speed of channel closure for other family members (PubMed:9763623). Promotes the closure of KCNA1, KCNA2 and KCNA5 channels (PubMed:7499366, PubMed:7890032, PubMed:7603988, PubMed:7649300, PubMed:8938711, PubMed:12077175, PubMed:12130714, PubMed:15361858, PubMed:17540341, PubMed:19713757). Accelerates KCNA4 channel closure (PubMed:7890032, PubMed:7649300, PubMed:7890764, PubMed:9763623). Accelerates the closure of heteromeric channels formed by KCNA1 and KCNA4 (PubMed:17156368). Accelerates the closure of heteromeric channels formed by KCNA2, KCNA5 and KCNA6 (By similarity). Isoform KvB1.2 has no effect on KCNA1, KCNA2 or KCNB1 (PubMed:7890032, PubMed:7890764). Enhances KCNB1 and KCNB2 channel activity (By similarity). Binds NADPH; this is required for efficient down-regulation of potassium channel activity (PubMed:17540341). Has NADPH-dependent aldoketoreductase activity (By similarity). Oxidation of the bound NADPH strongly decreases N-type inactivation of potassium channel activity (By similarity).

### **Product images:**

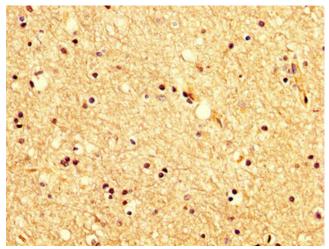


IHC image of TA388324 diluted at 1:200 and staining in paraffin-embedded human pancreatic cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.

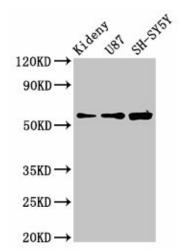




Immunofluorescence staining of HepG2 cells with TA388324 at 1:66, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IHC image of TA388324 diluted at 1:200 and staining in paraffin-embedded human brain tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Western Blot

Positive WB detected in: Mouse kidney tissue, U87 whole cell lysate, SH-SY5Y whole cell lysate All lanes: KCNAB1 antibody at  $3.9\mu g/ml$  Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 47, 45, 46 kDa Observed band size: 60 kDa