

## Product datasheet for **CF503971**

### **Kv beta 1 (KCNAB1) Mouse Monoclonal Antibody [Clone ID: OTI7F12]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OTI7F12
<b>Applications:</b>	FC, IF, IHC, WB
<b>Recommended Dilution:</b>	WB 1:1000, IHC 1:150, IF 1:100, FLOW 1:100
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Full length human recombinant protein of human KCNAB1(NP_751891) produced in HEK293T cell.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	44.5 kDa
<b>Gene Name:</b>	potassium voltage-gated channel subfamily A regulatory beta subunit 1
<b>Database Link:</b>	<a href="#">NP_751891</a> <a href="#">Entrez Gene 16497 Mouse</a> <a href="#">Entrez Gene 29737 Rat</a> <a href="#">Entrez Gene 7881 Human</a> <a href="#">Q14722</a>



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**Background:**

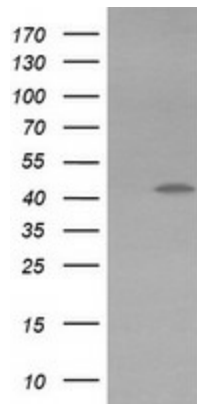
Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in *Drosophila*, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member includes three distinct isoforms which are encoded by three alternatively spliced transcript variants of this gene. These three isoforms are beta subunits, which form heteromultimeric complex with alpha subunits and modulate the activity of the pore-forming alpha subunits. [provided by RefSeq, Jul 2008]

**Synonyms:**

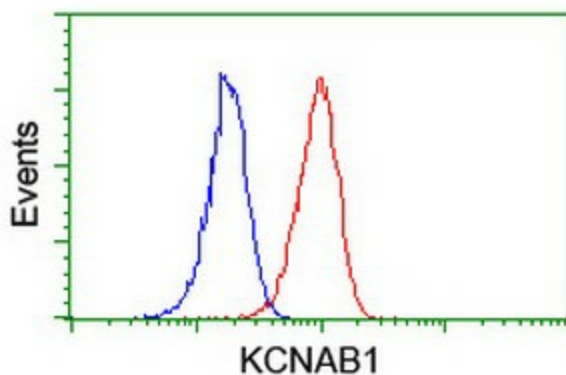
AKR6A3; hKvb3; hKvBeta3; KCNA1B; KV-BETA-1; Kvb1.3

**Protein Families:**

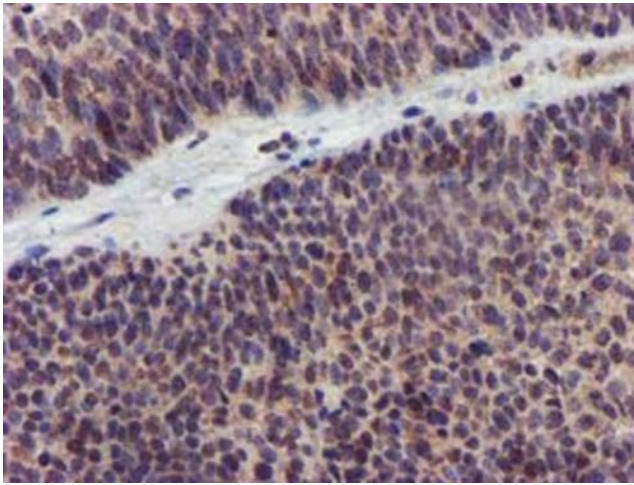
Druggable Genome, Ion Channels: Other

**Product images:**


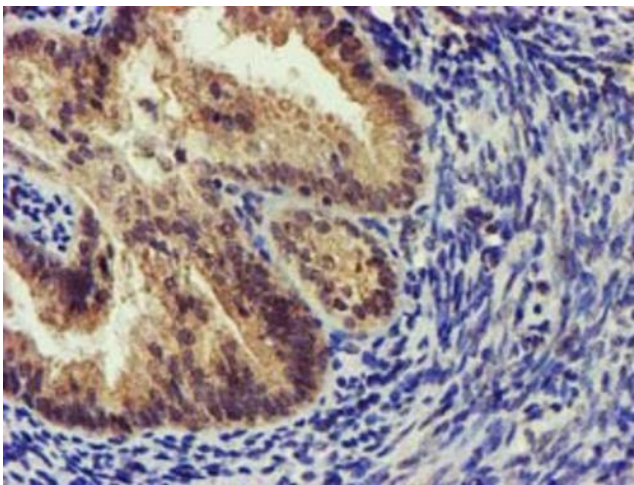
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KCNAB1 (Cat# [RC207384], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-KCNAB1 (Cat# [TA503971]). Positive lysates [LY403531] (100ug) and [LC403531] (20ug) can be purchased separately from OriGene.



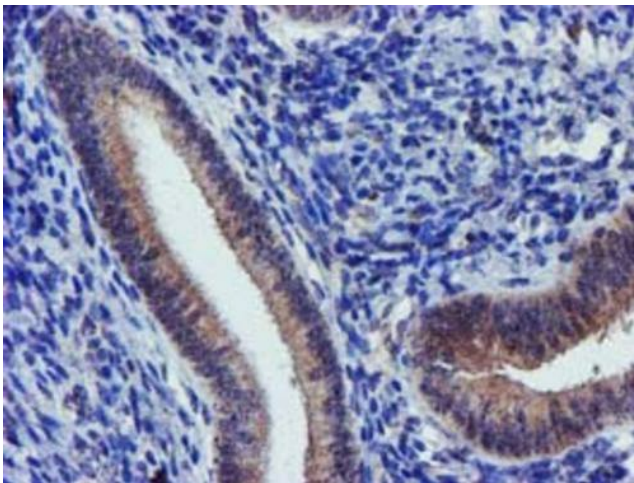
Flow cytometric Analysis of Jurkat cells, using anti-KCNAB1 antibody ([TA503971]), (Red), compared to a nonspecific negative control antibody, (Blue).



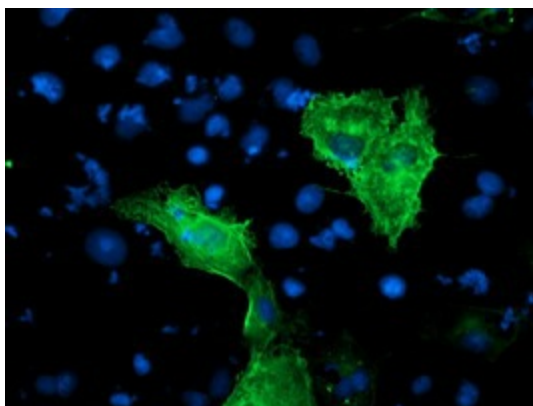
Immunohistochemical staining of paraffin-embedded Carcinoma of Human bladder tissue using anti-KCNA1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-KCNA1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human endometrium tissue within the normal limits using anti-KCNA1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-KCNA1 mouse monoclonal antibody ([TA503971]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY KCNA1 ([RC207384]).