

## OriGene Technologies, Inc.

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## Product datasheet for TP506299

## Kcnab1 (NM\_010597) Mouse Recombinant Protein

## **Product data:**

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse potassium voltage-gated channel, shaker-related subfamily, beta member 1 (Kcnab1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone	>MR206299 protein sequence
or AA Sequence:	Red=Cloning site Green=Tags(s)
	MQVSIACTEHNLKSRNGEDRLLSKQSSNAPNVVNAARAKFRTVAIIARSLGTFTPQHHISLKESTAKQTG MKYRNLGKSGLRVSCLGLGTWVTFGGQISDEVAERLMTIAYESGVNLFDTAEVYAAGKAEVILGSIIKKK GWRRSSLVITTKLYWGGKAETERGLSRKHIIEGLKGSLQRLQLEYVDVVFANRPDSNTPMEEIVRAMTHV INQGMAMYWGTSRWSAMEIMEAYSVARQFNMIPPVCEQAEYHLFQREKVEVQLPELYHKIGVGAMTWS PL ACGIISGKYGNGVPESSRASLKCYQWLKERIVSEEGRKQQNKLKDLSPIAERLGCTLPQLAVAWCLRNEG VSSVLLGSSTPEQLIENLGAIQVLPKMTSHVVNEIDNILRNKPYSKKDYRS
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-MYC/DDK
Predicted MW:	44.7 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP 034727</u>



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	Kcnab1 (NM_010597) Mouse Recombinant Protein – TP506299
Locus ID:	16497
UniProt ID:	<u>P63143</u>
RefSeq Size:	3267
Cytogenetics:	3 30.15 cM
RefSeq ORF:	1203
Synonyms:	Akr8a8; Kvbeta1.1; mKv(beta)1
Summary:	Cytoplasmic potassium channel subunit that modulates the characteristics of the channel- forming alpha-subunits (PubMed:10454353). Modulates action potentials via its effect on the pore-forming alpha subunits (PubMed:10454353). Promotes expression of the pore-forming alpha subunits at the cell membrane, and thereby increases channel activity (PubMed:8824288). 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 (By similarity). Promotes the closure of KCNA1, KCNA2 and KCNA5 channels (By similarity). Accelerates KCNA4 channel closure (By similarity). Accelerates the closure of heteromeric channels formed by KCNA1 and KCNA4 (By similarity). Accelerates the closure of heteromeric channels formed by KCNA2, KCNA5 and KCNA6 (By similarity). Enhances KCNB1 and KCNB2 channel activity (PubMed:8824288). Binds NADPH; this is required for efficient down-regulation of potassium channel activity (By similarity). Has NADPH-dependent aldoketoreductase activity (By similarity). Oxidation of the bound NADPH strongly decreases N-type inactivation of potassium channel activity (By similarity). [UniProtKB/Swiss-Prot Function]

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