

Store at  
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#81935**KCTD12 (D8V4J) Rabbit mAb**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IP	<b>Reactivity:</b> H M	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 33	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q96CX2	<b>Entrez-Gene Id:</b> 115207
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**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation

**Dilution**

1:1000  
1:50

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

KCTD12 (D8V4J) Rabbit mAb recognizes endogenous levels of total KCTD12 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro177 of human KCTD12 protein.

**Background**

Potassium channel tetramerization domain-containing protein 12 (KCTD12) belongs to the family of KCTD proteins, which also contains KCTD8, 12b, and 16. These proteins are auxiliary subunits of GABA<sub>B</sub> receptors (1). The principal subunit of the GABA<sub>B</sub> receptor is formed by two GABA<sub>B</sub> receptors, which bind to GABA<sub>B</sub> ligands, couple to G proteins to inhibit adenylate cyclase production, and gate ion channels (e.g., the GIRK channels) (2). The auxiliary subunits contribute to receptor desensitization. KCTD12 produces fast desensitization by uncoupling the βγ subunits of the G protein from their effector channels (3). Research studies indicate that KCTD12 represents a biomarker with diagnostic and prognostic potential for gastrointestinal stromal tumors (4).

**Background References**

- Schwenk, J. et al. (2010) *Nature* 465, 231-5.
- Gassmann, M. and Bettler, B. (2012) *Nat Rev Neurosci* 13, 380-94.
- Turecek, R. et al. (2014) *Neuron* 82, 1032-44.
- Hasegawa, T. et al. (2013) *Hum Pathol* 44, 1271-7.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation

**Cross-Reactivity Key**

**H:** Human **M:** Mouse

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