

KCTD12 (E-12): sc-84335

BACKGROUND

The BTB (broad-complex, tramtrack and bric a brac) domain, also known as the POZ (poxvirus and zinc finger) domain, is an N-terminal homodimerization domain that contains multiple copies of Kelch repeats and/or C₂H₂-type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. KCTD12 (potassium channel tetramerisation domain containing 12), also known as PFET1 or PFETIN, is a 325 amino acid protein that is expressed in fetal organs, with highest levels in the cochlea and brain and extremely low levels in adult organs, such as brain and lung. KCTD12 is considered a prognostic biomarker of gastrointestinal stromal tumors.

REFERENCES

1. Bardwell, V.J. and Treisman, R. 1994. The POZ domain: a conserved protein-protein interaction motif. *Genes Dev.* 8: 1664-1677.
2. Zollman, S., et al. 1994. The BTB domain, found primarily in zinc finger proteins, defines an evolutionarily conserved family that includes several developmentally regulated genes in *Drosophila*. *Proc. Natl. Acad. Sci. USA* 91: 10717-10721.
3. Ahmad, K.F., et al. 1998. Crystal structure of the BTB domain from PLZF. *Proc. Natl. Acad. Sci. USA* 95: 12123-12128.
4. Resendes, B.L., et al. 2004. Isolation from cochlea of a novel human intronless gene with predominant fetal expression. *J. Assoc. Res. Otolaryngol.* 5: 185-202.
5. Igarashi, A., et al. 2007. Selection of common markers for bone marrow stromal cells from various bones using real-time RT-PCR: effects of passage number and donor age. *Tissue Eng.* 13: 2405-2417.

CHROMOSOMAL LOCATION

Genetic locus: KCTD12 (human) mapping to 13q22.3; Kctd12 (mouse) mapping to 14 E2.3.

SOURCE

KCTD12 (E-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of KCTD12 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84335 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

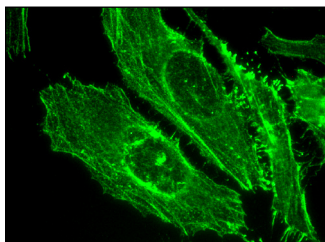
KCTD12 (E-12) is recommended for detection of KCTD12 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other KCTD family members.

KCTD12 (E-12) is also recommended for detection of KCTD12 in additional species, including canine.

Suitable for use as control antibody for KCTD12 siRNA (h): sc-75374, KCTD12 siRNA (m): sc-146383, KCTD12 shRNA Plasmid (h): sc-75374-SH, KCTD12 shRNA Plasmid (m): sc-146383-SH, KCTD12 shRNA (h) Lentiviral Particles: sc-75374-V and KCTD12 shRNA (m) Lentiviral Particles: sc-146383-V.

Molecular Weight of KCTD12: 36 kDa.

DATA



KCTD12 (E-12): sc-84335. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

SELECT PRODUCT CITATIONS

1. Hayasaki, H., et al. 2012. Heterogenous GABA_B receptor-mediated pathways are involved in the local GABAergic system of the rat trigeminal ganglion: possible involvement of KCTD proteins. *Neuroscience* 218: 344-358.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **KCTD12 (F-6): sc-271855**, our highly recommended monoclonal alternative to KCTD12 (E-12).