

# KCTD20 (B-11): sc-515219

## BACKGROUND

KCTD20 (BTB/POZ domain-containing protein KCTD20), also known as C6orf69, is a 419 amino acid protein that forms a complex with MARK4. Containing one BTB (POZ) domain, KCTD20 exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 6p21.31 and mouse chromosome 17 A3.3. Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Porphyrria cutanea tarda is associated with chromosome 6 through the HFE gene, which, when mutated, predisposes an individual to developing this porphyria. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatibility complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are also located on chromosome 6.

## REFERENCES

1. Brunner, H.G., et al. 1994. A Stickler syndrome gene is linked to chromosome 6 near the COL11A2 gene. *Hum. Mol. Genet.* 3: 1561-1564.
2. Cesari, R., et al. 2003. Parkin, a gene implicated in autosomal recessive juvenile parkinsonism, is a candidate tumor suppressor gene on chromosome 6q25-q27. *Proc. Natl. Acad. Sci. USA* 100: 5956-5961.
3. Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. *Genes Chromosomes Cancer* 47: 159-164.
4. Fan, J., et al. 2010. Linkage disequilibrium mapping of the chromosome 6q21-22.31 bipolar I disorder susceptibility locus. *Am. J. Med. Genet. B Neuropsychiatr. Genet.* 153B: 29-37.
5. Jalil, S., et al. 2010. Associations among behavior-related susceptibility factors in porphyria cutanea tarda. *Clin. Gastroenterol. Hepatol.* 8: 297-302, 302.e1.

## CHROMOSOMAL LOCATION

Genetic locus: KCTD20 (human) mapping to 6p21.31; Kctd20 (mouse) mapping to 17 A3.3.

## SOURCE

KCTD20 (B-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 33-58 near the N-terminus of KCTD20 of human origin.

## PRODUCT

Each vial contains 200 µg IgA lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-515219 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

KCTD20 (B-11) is recommended for detection of KCTD20 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for KCTD20 siRNA (h): sc-95124, KCTD20 siRNA (m): sc-146392, KCTD20 shRNA Plasmid (h): sc-95124-SH, KCTD20 shRNA Plasmid (m): sc-146392-SH, KCTD20 shRNA (h) Lentiviral Particles: sc-95124-V and KCTD20 shRNA (m) Lentiviral Particles: sc-146392-V.

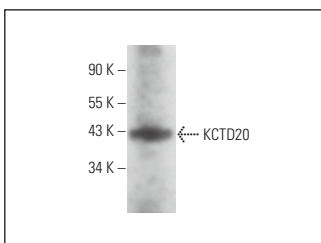
Molecular Weight of KCTD20 isoforms 1/2: 47/29 kDa.

Positive Controls: human brain extract: sc-364375 or rat brain extract: sc-2392.

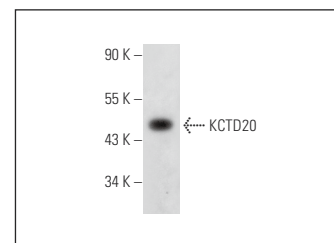
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGλ BP-FITC: sc-516185 or m-IgGλ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



KCTD20 (B-11): sc-515219. Western blot analysis of KCTD20 expression in rat brain tissue extract.



KCTD20 (B-11): sc-515219. Western blot analysis of KCTD20 expression in human brain tissue extract.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.