

KLHDC5 (N-14): sc-168371

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. The Kelch domain-containing protein 5 (KLHDC5) contains one BTB (POZ) domain and six Kelch repeats suggesting a role in transcription regulation. KLHDC5 is a 505 amino acid protein that is phosphorylated upon DNA damage, probably by ATM or ATR. KLHDC5 is encoded by a gene located on human chromosome 12p11.22. Encoding over 1,100 genes, chromosome 12 comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

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- Scherer, S.E., Muzny, D.M., Buhay, C.J., Chen, R., Cree, A., Ding, Y., Dugan-Rocha, S., Gill, R., Gunaratne, P., Harris, R.A., Hawes, A.C., Hernandez, J., Hodgson, A.V., et al. 2006. The finished DNA sequence of human chromosome 12. *Nature* 440: 346-351.

CHROMOSOMAL LOCATION

Genetic locus: KLHDC5 (human) mapping to 12p11.22; Klhdc5 (mouse) mapping to 6 G3.

SOURCE

KLHDC5 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of KLHDC5 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168371 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KLHDC5 (N-14) is recommended for detection of KLHDC5 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 KLHDC family members.

KLHDC5 (N-14) is also recommended for detection of KLHDC5 in additional species, including bovine and porcine.

Suitable for use as control antibody for KLHDC5 siRNA (h): sc-95696, KLHDC5 siRNA (m): sc-146504, KLHDC5 shRNA Plasmid (h): sc-95696-SH, KLHDC5 shRNA Plasmid (m): sc-146504-SH, KLHDC5 shRNA (h) Lentiviral Particles: sc-95696-V and KLHDC5 shRNA (m) Lentiviral Particles: sc-146504-V.

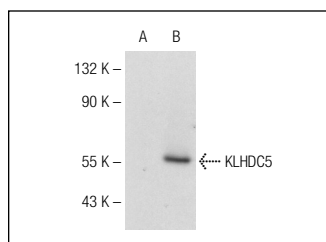
Molecular Weight of KLHDC5: 57 kDa.

Positive Controls: KLHDC5 (h): 293T Lysate: sc-112109.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotting A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



KLHDC5 (N-14): sc-168371. Western blot analysis of KLHDC5 expression in non-transfected: sc-117752 (A) and human KLHDC5 transfected: sc-112109 (B) 293T whole cell lysates.

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.