

XRCC6BP1 (P-15): sc-169826

BACKGROUND

XRCC6BP1, also known as mitochondrial inner membrane protease ATP23 homolog or KUB3, is a 246 amino acid protein. As a member of the peptidase M76 family, XRCC6BP1 interacts with XRCC6. The gene encoding XRCC6BP1 maps to human chromosome 12 and encodes Ku70 binding protein. Ku70 is a part of the DNA-dependent protein kinase complex and is involved in double-strand break repair. It is suggested that XRCC6BP1 gene amplification affects double-strand break repair in glioblastoma cell lines. 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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2. Gwynn, B., et al. 1996. Genetic localization of Cd63, a member of the transmembrane 4 superfamily, reveals two distinct loci in the mouse genome. *Genomics* 35: 389-391.
3. Yang, C.R., et al. 1999. Isolation of Ku70-binding proteins (KUBs). *Nucleic Acids Res.* 27: 2165-2174.
4. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14: 2121-2127.
5. Scherer, S.E., et al. 2006. The finished DNA sequence of human chromosome 12. *Nature* 440: 346-351.
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CHROMOSOMAL LOCATION

Genetic locus: *Xrcc6bp1* (mouse) mapping to 10 D3.

SOURCE

XRCC6BP1 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of XRCC6BP1 of mouse 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-169826 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

XRCC6BP1 (P-15) is recommended for detection of XRCC6BP1 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 XRCC6BP1 siRNA (m): sc-155393, XRCC6BP1 shRNA Plasmid (m): sc-155393-SH and XRCC6BP1 shRNA (m) Lentiviral Particles: sc-155393-V.

Molecular Weight of XRCC6BP1: 28 kDa.

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 Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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.

PROTOCOLS

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