

NHLRC2 (K-18): sc-240737

BACKGROUND

NHLRC2 (NHL repeat containing 2) is a 726 amino acid protein that contains 6 NHL repeats and one thioredoxin domain. Existing as two alternatively spliced isoforms, NHLRC2 is encoded by a gene that maps to human chromosome 10q25.3. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of total DNA in cells and encodes nearly 1,200 genes. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, Multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

1. Troelstra, C., et al. 1992. Localization of the nucleotide excision repair gene ERCC6 to human chromosome 10q11-q21. *Genomics* 12: 745-749.
2. Jabs, E.W., et al. 1994. Jackson-Weiss and Crouzon syndromes are allelic with mutations in fibroblast growth factor receptor 2. *Nat. Genet.* 8: 275-279.
3. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. *Neurogenetics* 4: 1-15.
4. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.
5. Cho, M.Y., et al. 2008. First report of ovarian dysgerminoma in Cowden syndrome with germline PTEN mutation and PTEN-related 10q loss of tumor heterozygosity. *Am. J. Surg. Pathol.* 32: 1258-1264.
6. Yin, Y., et al. 2008. PTEN: a new guardian of the genome. *Oncogene* 27: 5443-5453.
7. Laugel, V., et al. 2010. Mutation update for the CSB/ERCC6 and CSA/ERCC8 genes involved in Cockayne syndrome. *Hum. Mutat.* 31: 113-126.

CHROMOSOMAL LOCATION

Genetic locus: NHLRC2 (human) mapping to 10q25.3; Nhlrc2 (mouse) mapping to 19 D2.

SOURCE

NHLRC2 (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NHLRC2 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-240737 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

NHLRC2 (K-18) is recommended for detection of NHLRC2 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 NHLRC3.

NHLRC2 (K-18) is also recommended for detection of NHLRC2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NHLRC2 siRNA (h): sc-90575, NHLRC2 siRNA (m): sc-149961, NHLRC2 shRNA Plasmid (h): sc-90575-SH, NHLRC2 shRNA Plasmid (m): sc-149961-SH, NHLRC2 shRNA (h) Lentiviral Particles: sc-90575-V and NHLRC2 shRNA (m) Lentiviral Particles: sc-149961-V.

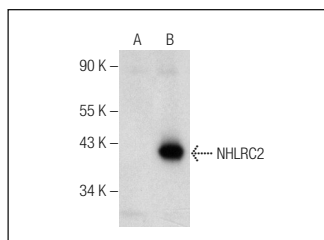
Molecular Weight of NHLRC2 isoforms: 79/40 kDa.

Positive Controls: NHLRC2 (h): 293T Lysate: sc-115266 or NHLRC2 (m): 293T Lysate: sc-122048.

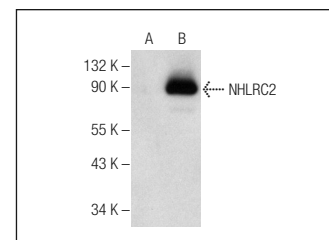
RECOMMENDED SECONDARY REAGENTS

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) 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



NHLRC2 (K-18): sc-240737. Western blot analysis of NHLRC2 expression in non-transfected: sc-117752 (A) and human NHLRC2 transfected: sc-115266 (B) 293T whole cell lysates.



NHLRC2 (K-18): sc-240737. Western blot analysis of NHLRC2 expression in non-transfected: sc-117752 (A) and mouse NHLRC2 transfected: sc-122048 (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.

PROTOCOLS

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