

RBP-J κ (D-19): sc-55019

BACKGROUND

Recombination signal binding protein J κ (RBP-J κ), also designated KBF2 or CBF1, is the mammalian homolog of the *Drosophila* suppressor of hairless [Su(H)], a protein involved in the development of the peripheral nervous system. RBP-J κ is ubiquitously expressed in mammalian tissues and is involved in the regulation of gene expression. RBP-J κ has been shown to directly interact with the intercellular domain of the cell surface receptor Notch 1. Proteolytically cleaved Notch 1 translocates to the nucleus, where it binds DNA-bound RBP-J κ and activates transcription of target genes. These genes include NF κ B p52 and the Epstein-Barr virus (EBV) protein EBNA-2, both of which contain RBP-J κ binding sequences within their promoter regions.

REFERENCES

1. Amakawa, R., et al. 1993. Human J κ recombination signal binding protein gene (IGKJRB): comparison with its mouse homologue. *Genomics* 17: 306-315.
2. Waltzer, L., et al. 1994. The human J κ recombination signal sequence binding protein (RBP-J κ) targets the Epstein-Barr virus EBNA-2 protein to its DNA responsive elements. *EMBO J.* 13: 5633-5638.

CHROMOSOMAL LOCATION

Genetic locus: RBPJ (human) mapping to 4p15.2; Rbpj (mouse) mapping to 5 C1.

SOURCE

RBP-J κ (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RBP-J κ of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-55019 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RBP-J κ (D-19) is recommended for detection of RBP-J κ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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). RBP-J κ (D-19) is also recommended for detection of RBP-J κ in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for RBP-J κ siRNA (h): sc-38214, RBP-J κ siRNA (m): sc-38215, RBP-J κ shRNA Plasmid (h): sc-38214-SH, RBP-J κ shRNA Plasmid (m): sc-38215-SH, RBP-J κ shRNA (h) Lentiviral Particles: sc-38214-V and RBP-J κ shRNA (m) Lentiviral Particles: sc-38215-V.

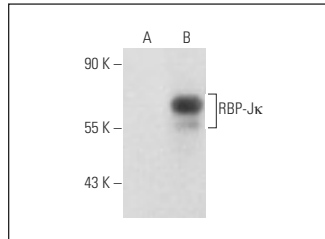
Molecular Weight of RBP-J κ : 56 kDa.

Positive Controls: BJAB nuclear extract: sc-2145, RBP-J κ (h3): 293T Lysate: sc-177851 or NIH/3T3 whole cell lysate: sc-2210.

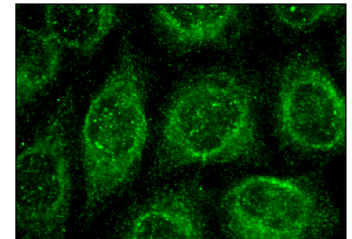
RECOMMENDED SECONDARY REAGENTS

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



RBP-J κ (D-19): sc-55019. Western blot analysis of RBP-J κ expression in non-transfected: sc-117752 (A) and human RBP-J κ transfected: sc-177851 (B) 293T whole cell lysates.



RBP-J κ (D-19): sc-55019. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Magee, T.R., et al. 2011. Maternal undernourished fetal kidneys exhibit differential regulation of nephrogenic genes including downregulation of the Notch signaling pathway. *Reprod. Sci.* 18: 563-576.
2. Johnson, S.E. and Barrick, D. 2012. Dissecting and circumventing the requirement for RAM in CSL-dependent Notch signaling. *PLoS ONE* 7: e39093.
3. Zhang, S., et al. 2014. Uterine Rbpj is required for embryonic-uterine orientation and decidual remodeling via Notch pathway-independent and -dependent mechanisms. *Cell Res.* 24: 925-942.

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.


 MONOS
Satisfaction
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Try **RBP-J κ (E-7): sc-271128**, our highly recommended monoclonal alternative to RBP-J κ (D-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **RBP-J κ (E-7): sc-271128**.