

BLU (K-14): sc-30302

BACKGROUND

The human BLU gene maps to chromosome 3p21.3 and is a potential tumor suppressor gene. Methylation of the BLU promoter region correlates with downregulation of BLU transcript expression in tumor cell lines. The high incidence of BLU alterations also suggests its involvement in the development of nasopharyngeal carcinoma as well as non-small cell lung cancers. Transcripts of this soluble, cytoplasmic protein occur in lung tissue, with trace expression in kidney, liver, placenta, and brain. Expression of a shorter isoform occurs in testis.

REFERENCES

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3. Online Mendelian Inheritance in Man, OMIM[™]. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607070. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Hesson, L., et al. 2004. Frequent epigenetic inactivation of RASSF1A and BLU genes located within the critical 3p21.3 region in gliomas. *Oncogene* 23: 2408-2419.
5. Qiu, G.H., et al. 2004. The candidate tumor suppressor gene BLU, located at the commonly deleted region 3p21.3, is an E2F-regulated, stress-responsive gene and inactivated by both epigenetic and genetic mechanisms in nasopharyngeal carcinoma. *Oncogene* 23: 4793-4806.
6. Abe, M., et al. 2005. CpG island methylator phenotype is a strong determinant of poor prognosis in neuroblastomas. *Cancer Res.* 65: 828-834.
7. Marsit, C.J., et al. 2005. Hypermethylation of RASSF1A and BLU tumor suppressor genes in non-small cell lung cancer: implications for tobacco smoking during adolescence. *Int. J. Cancer* 114: 219-223.
8. Tischoff, I., et al. 2005. Allele loss and epigenetic inactivation of 3p21.3 in malignant liver tumors. *Int. J. Cancer* 115: 684-689.
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CHROMOSOMAL LOCATION

Genetic locus: ZMYND10 (human) mapping to 3p21.31; Zmynd10 (mouse) mapping to 9 F1.

SOURCE

BLU (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BLU of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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-30302 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BLU (K-14) is recommended for detection of BLU of mouse, rat and human 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).

BLU (K-14) is also recommended for detection of BLU in additional species, including canine.

Suitable for use as control antibody for BLU siRNA (h): sc-105123, BLU siRNA (m): sc-141716, BLU shRNA Plasmid (h): sc-105123-SH, BLU shRNA Plasmid (m): sc-141716-SH, BLU shRNA (h) Lentiviral Particles: sc-105123-V and BLU shRNA (m) Lentiviral Particles: sc-141716-V.

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.

RESEARCH USE

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

PROTOCOLS

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



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Try **BLU (G-10): sc-398350**, our highly recommended monoclonal alternative to BLU (K-14).