

BLU (G-10): sc-398350

BACKGROUND

The human BLU gene maps to chromosome 3p21.31 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

1. Liu, X., et al. 2003. Alterations of BLU, a candidate tumor suppressor gene on chromosome 3p21.3, in human nasopharyngeal carcinoma. *Int. J. Cancer* 106: 60-65.
2. Agathangelou, A., et al. 2003. Epigenetic inactivation of the candidate 3p21.3 suppressor gene BLU in human cancers. *Oncogene* 22: 1580-1588.
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.

CHROMOSOMAL LOCATION

Genetic locus: ZMYND10 (human) mapping to 3p21.31.

SOURCE

BLU (G-10) is a mouse monoclonal antibody raised against amino acids 9-206 mapping near the N-terminus of BLU of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BLU (G-10) is available conjugated to agarose (sc-398350 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398350 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398350 PE), fluorescein (sc-398350 FITC), Alexa Fluor® 488 (sc-398350 AF488), Alexa Fluor® 546 (sc-398350 AF546), Alexa Fluor® 594 (sc-398350 AF594) or Alexa Fluor® 647 (sc-398350 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398350 AF680) or Alexa Fluor® 790 (sc-398350 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

BLU (G-10) is recommended for detection of BLU of human origin by Western Blotting (starting dilution 1:100, 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).

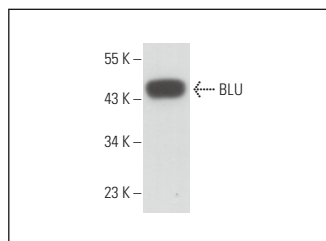
Suitable for use as control antibody for BLU siRNA (h): sc-105123, BLU shRNA Plasmid (h): sc-105123-SH and BLU shRNA (h) Lentiviral Particles: sc-105123-V.

Positive Controls: human testis extract: sc-363781 or T-47D cell lysate: sc-2293.

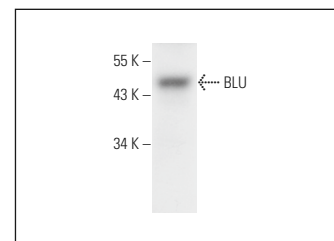
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



BLU (G-10): sc-398350. Western blot analysis of BLU expression in T-47D whole cell lysate. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



BLU (G-10): sc-398350. Western blot analysis of BLU expression in human testis tissue extract.

SELECT PRODUCT CITATIONS

1. Haider, S., et al. 2019. Estrogen signaling drives ciliogenesis in human endometrial organoids. *Endocrinology* 160: 2282-2297.

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.

PROTOCOLS

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