

# NKLAM (K-12): sc-165115

## BACKGROUND

NKLAM (natural killer lytic-associated molecule), also known as RNF19B (RING finger protein 19B) or IBRDC3 (IBR domain-containing protein 3), is a 732 amino acid multi-pass membrane protein of the cytoplasmic granule that functions as an E3 ubiquitin-protein ligase. A member of the RBR family and RNF19 subfamily, NKLAM is expressed in activated macrophages, natural killer cells and cytotoxic T cells where it functions in cytolytic activity. NKLAM undergoes alternative splicing events to produce four isoforms and contains one IBR-type zinc finger and two RING-type zinc fingers. NKLAM interacts with UBE2L3, UCKL1 and UBC8, and is induced by both IL-2 and IFN- $\beta$ . The gene encoding NKLAM maps to human chromosome 1p35.1.

## REFERENCES

1. Kozlowski, M., Schorey, J., Portis, T., Grigoriev, V. and Kornbluth, J. 1999. NK lytic-associated molecule: a novel gene selectively expressed in cells with cytolytic function. *J. Immunol.* 163: 1775-1785.
2. Portis, T., Anderson, J., Esposito, A. and Kornbluth, J. 2000. Gene structure of human and mouse NKLAM, a gene associated with cellular cytotoxicity. *Immunogenetics* 51: 546-555.
3. Ardley, H.C. and Robinson, P.A. 2005. E3 ubiquitin ligases. *Essays Biochem.* 41: 15-30.
4. Fortier, J.M. and Kornbluth, J. 2006. NK lytic-associated molecule, involved in NK cytotoxic function, is an E3 ligase. *J. Immunol.* 176: 6454-6463.
5. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610872: World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Christensen, D.E. and Klevit, R.E. 2009. Dynamic interactions of proteins in complex networks: identifying the complete set of interacting E2s for functional investigation of E3-dependent protein ubiquitination. *FEBS J.* 276: 5381-5389.

## CHROMOSOMAL LOCATION

Genetic locus: RNF19B (human) mapping to 1p35.1; Rnf19b (mouse) mapping to 4 D2.2.

## SOURCE

NKLAM (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NKLAM of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-165115 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-165115 X, 200  $\mu$ g/0.1 ml.

## APPLICATIONS

NKLAM (K-12) is recommended for detection of NKLAM 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).

NKLAM (K-12) is also recommended for detection of NKLAM in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NKLAM siRNA (h): sc-88628, NKLAM siRNA (m): sc-149996, NKLAM shRNA Plasmid (h): sc-88628-SH, NKLAM shRNA Plasmid (m): sc-149996-SH, NKLAM shRNA (h) Lentiviral Particles: sc-88628-V and NKLAM shRNA (m) Lentiviral Particles: sc-149996-V.

NKLAM (K-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ubiquitinated NKLAM: 150 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.