Ub (N-19): sc-6085



The Power to Questio

BACKGROUND

Ubiquitin (Ub) is among the most phylogenetically conserved proteins known. The primary function of ubiquitin is to clear abnormal, foreign and improperly folded proteins by targeting them for degradation by the 26S proteosome. This small 76 amino acid protein can be covalently attached to cellular proteins via an isopeptide linkage between the carboxy-terminal group of ubiquitin and lysine amino groups on the acceptor protein. For proteolysis to occur, ubiquitin oligomers must be assembled. Ubiquitin chains on proteolytic substrates are commonly found to have an isopeptide bridge between Lysine 48 of one ubiquitin molecule and the carboxy-terminus of a neighboring ubiquitin molecule. Ubiquitin also plays a role in regulating signal transduction cascades through the elimination inhibitory proteins, such as $1\kappa B\alpha$ and p27.

CHROMOSOMAL LOCATION

Genetic locus: UBB (human) mapping to 17p11.2; Ubb (mouse) mapping to 11 B2.

SOURCE

Ub (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Ub of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6085 P, ($100 \mu g$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ub (N-19) is recommended for detection of Ub of broad mammalian species, *Drosophila melanogaster* and *Xenopus laevis* 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).

Ub (N-19) is also recommended for detection of Ub in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ub siRNA (h): sc-29513, Ub siRNA (m): sc-36770, Ub shRNA Plasmid (h): sc-29513-SH, Ub shRNA Plasmid (m): sc-36770-SH, Ub shRNA (h) Lentiviral Particles: sc-29513-V and Ub shRNA (m) Lentiviral Particles: sc-36770-V.

Molecular Weight of Ub: 9 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or Jurkat whole cell lysate: sc-2204.

RESEARCH USE

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

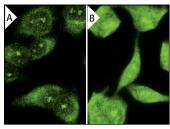
PROTOCOLS

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

STORAGE

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

DATA



Ub (N-19): sc-6085. Immunofluorescense staining of methanol-fixed HeLa cells showing weak (A) and strong cytoplasmic and nuclear staining after treatment with the proteasome inhibitor LLnL, showing accumulation of ubiquitinated proteins (B).

SELECT PRODUCT CITATIONS

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Try **Ub** (P4D1): sc-8017 or **Ub** (A-5): sc-166553, our highly recommended monoclonal alternatives to Ub (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Ub** (P4D1): sc-8017.