

UCKL1 (SY-16): sc-100636

BACKGROUND

UCKL1 (uridine-cytidine kinase 1-like 1), also known as UCK1L, URKL1 or F538, is a ubiquitously expressed 548 amino acid member of the uridine kinase family. Localized to the cytoplasm and translocated to the nucleus via interaction with EBV EBNA-3A (an Epstein-Barr nuclear antigen), UCKL1 is thought to participate in pyrimidine metabolism by accumulating UTP and CTP, both of which are needed for cell proliferation and blast transformation. UCKL1 contains an N-terminal ATP/GTP-binding site and, once relocated to the nucleus, becomes part of the ATP-dependent ribonucleotide salvage pathway that catalytically converts UTP and CTP to UMP and CMP, respectively. In addition, UCKL1 functions as a substrate for the E3 ligase NKLAM, thereby causing the ubiquitin-mediated degradation of UCKL1. Three isoforms of UCKL1 are expressed due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: UCKL1 (human) mapping to 20q13.33; Uckl1 (mouse) mapping to 2 H4.

SOURCE

UCKL1 (SY-16) is a mouse monoclonal antibody raised against recombinant UCKL1 of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

UCKL1 (SY-16) is recommended for detection of UCKL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 UCKL1 siRNA (h): sc-76799, UCKL1 siRNA (m): sc-154886, UCKL1 shRNA Plasmid (h): sc-76799-SH, UCKL1 shRNA Plasmid (m): sc-154886-SH, UCKL1 shRNA (h) Lentiviral Particles: sc-76799-V and UCKL1 shRNA (m) Lentiviral Particles: sc-154886-V.

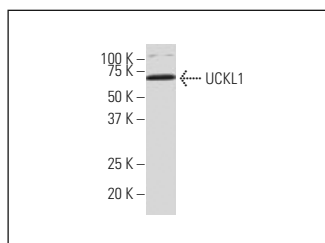
Molecular Weight of UCKL1: 61 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

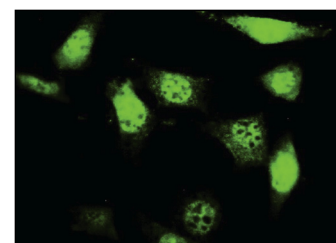
RECOMMENDED SUPPORT REAGENTS

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



UCKL1 (SY-16): sc-100636. Western blot analysis of UCKL1 expression in NIH/3T3 whole cell lysate.



UCKL1 (SY-16): sc-100636. Immunofluorescence staining of paraformaldehyde-fixed NIH/3T3 cells showing nuclear and cytoplasmic localization.

PROTOCOLS

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