SANTA CRUZ BIOTECHNOLOGY, INC.

UBL4A (N-16): sc-169743

BACKGROUND

The distal portion of the long arm of the human X chromosome is one of the most gene dense portions in the entire human genome and also contains many genes that have been linked to genetic diseases. The gene encoding the 157 amino acid protein, UBL4A (ubiquitin-like protein 4A), has a CpG island in the 5' region and is located on the X chromosome in close proximity to the gene encoding G6PD. UBL4A, also known as GDX, has been characterized as a ubiquitously expressed and highly conserved protein from humans to plants. The N-terminal region of UBL4A shares 43% sequence identity with ubiquitin, however the C-terminal region has no homology to ubiquitin and it is therefore unlikely that UBL4A plays any role in targeting cellular proteins for degradation. Due to gene promoter features, such as being rich in G-C residues, lacking TATA boxes and the repetition of the Sp1 transcription factor binding site, it is likely that the gene encoding UBL4A functions as a housekeeping gene.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: UBL4A (human) mapping to Xq28; Ubl4 (mouse) mapping to X A7.3.

SOURCE

UBL4A (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of UBL4A of human origin.

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-169743 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UBL4A (N-16) is recommended for detection of UBL4A 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); non cross-reactive with UBL4B.

UBL4A (N-16) is also recommended for detection of UBL4A in additional species, including bovine and porcine.

Suitable for use as control antibody for UBL4A siRNA (h): sc-90869, UBL4A siRNA (m): sc-154864, UBL4A shRNA Plasmid (h): sc-90869-SH, UBL4A shRNA Plasmid (m): sc-154864-SH, UBL4A shRNA (h) Lentiviral Particles: sc-90869-V and UBL4A shRNA (m) Lentiviral Particles: sc-154864-V.

Molecular Weight of UBL4A: 18 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™ 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.

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 or our catalog for detailed protocols and support products.