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 DX, 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


STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: UBL4A (human) mapping to Xq28.

SOURCE

UBL4A (C-24) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of UBL4A of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with <0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

UBL4A (C-24) is recommended for detection of UBL4A of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 UBL4A siRNA (h): sc-90869, UBL4A shRNA Plasmid (h): sc-90869-SH and UBL4A shRNA (h) Lentiviral Particles: sc-90869-V. Molecular Weight of UBL4A: 18 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 2) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbitIgG Staining Systems.

DATA

UBL4A (C-24): sc-130285. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

RESEARCH USE

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

FUNCTION

UBL4A (C-24): sc-130285. Western blot analysis of UBL4A expression in non-transfected (A) and human UBL4A transfected (B) 293 whole cell lysates.