

Kua (I-18): sc-87798

BACKGROUND

Uev1A, also designated CROC1, Uev1 and UBE2V1 for ubiquitin-conjugating enzyme E2 variant 1, shows sequence similarity to other ubiquitin-conjugating enzymes, but lacks the conserved cysteine residue critical for their catalytic activity. Therefore, Uev1A does not have ubiquitin-conjugating activity, but it can regulate noncanonical elongation of ubiquitin chains. In humans, the Uev1A gene is adjacent to the Kua gene. These genes are either expressed as separate transcripts encoding independent Kua and UEV1 proteins or as a hybrid Kua-UEV transcript, therefore encoding a two-domain protein. Kua belongs to a class of conserved proteins with juxtamembrane histidine-rich motifs. Also designated transmembrane protein 189 (TMEM189), Kua is a 270 amino acid protein that localizes to the cytoplasm.

REFERENCES

1. Rothofsky, M.L., et al. 1997. CROC-1 encodes a protein which mediates transcriptional activation of the human FOS promoter. *Gene* 195: 141-149.
2. Sancho, E., et al. 1998. Role of Uev1, an inactive variant of the E2 ubiquitin-conjugating enzymes, in *in vitro* differentiation and cell cycle behavior of HT-29-M6 intestinal mucosecretory cells. *Mol. Cell. Biol.* 18: 576-589.
3. Hofmann, R.M., et al. 1999. Noncanonical MMS2-encoded ubiquitin-conjugating enzyme functions in assembly of novel polyubiquitin chains for DNA repair. *Cell* 96: 645-653.
4. Deng, L., et al. 2000. Activation of the I κ B kinase complex by TRAF6 requires a dimeric ubiquitin-conjugating enzyme complex and a unique polyubiquitin chain. *Cell* 103: 351-361.
5. Thomson, T.M., et al. 2000. Fusion of the human gene for the polyubiquitination coeffector Uev1 with Kua, a newly identified gene. *Genome Res.* 10: 1743-1756.
6. Ito, M., et al. 2001. Molecular basis of T cell-mediated recognition of pancreatic cancer cells. *Cancer Res.* 61: 2038-2046.
7. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 602995. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: TMEM189 (human) mapping to 20q13.13; Tmem189 (mouse) mapping to 2 H3.

SOURCE

Kua (I-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Kua of human origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

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

Blocking peptide available for competition studies, sc-87798 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Kua (I-18) is recommended for detection of Kua of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Kua (I-18) is also recommended for detection of Kua in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Kua siRNA (h): sc-106739, Kua siRNA (m): sc-146610, Kua shRNA Plasmid (h): sc-106739-SH, Kua shRNA Plasmid (m): sc-146610-SH, Kua shRNA (h) Lentiviral Particles: sc-106739-V and Kua shRNA (m) Lentiviral Particles: sc-146610-V.

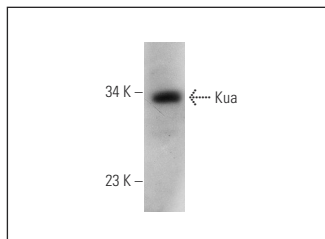
Molecular Weight of Kua: 31 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

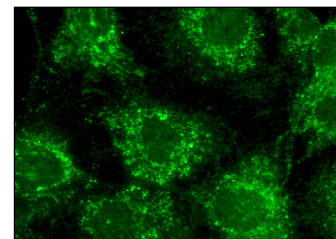
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Kua (I-18): sc-87798. Western blot analysis of Kua expression in Hep G2 whole cell lysate.



Kua (I-18): sc-87798. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic localization.

RESEARCH USE

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