

UPIIIa (H-180): sc-33570

BACKGROUND

The asymmetric unit membrane (AUM) forms numerous plaques, which cover the apical surface of the urothelium. These plaques are thought to strengthen the urothelium and reduce the risk of rupturing during bladder distention. They are composed of four major integral membrane proteins called uroplakins (UP). The uroplakin family comprises UPIa, UPIb, UPII and UPIII. Family members are conserved among several species, including human, mouse, rat, rabbit, canine, porcine and ovine. UPIa and UPIb form tightly packed structures with UPII and UPIII, respectively. This pairing is required for normal urothelial plaque formation and is regulated by proteolytic processing of the uroplakin proteins. Uroplakins are expressed in normal urothelium and are used as specific markers of urothelial differentiation. They are also expressed in a majority of transitional cell carcinomas of the bladder (TCCs), which make the uroplakins a useful marker for detecting bladder cancer metastasis and for staging and monitoring chemotherapeutic response.

CHROMOSOMAL LOCATION

Genetic locus: UPK3A (human) mapping to 22q13.31; Upk3a (mouse) mapping to 15 E2.

SOURCE

UPIIIa (H-180) is a rabbit polyclonal antibody raised against amino acids 21-200 mapping near the N-terminus of UPIIIa 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.

STORAGE

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

APPLICATIONS

UPIIIa (H-180) is recommended for detection of UPIIIa 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).

UPIIIa (H-180) is also recommended for detection of UPIIIa in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for UPIII siRNA (h): sc-41096, UPIII siRNA (m): sc-41097, UPIII shRNA Plasmid (h): sc-41096-SH, UPIII shRNA Plasmid (m): sc-41097-SH, UPIII shRNA (h) Lentiviral Particles: sc-41096-V and UPIII shRNA (m) Lentiviral Particles: sc-41097-V.

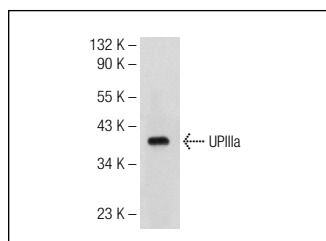
Molecular Weight of UPIIIa: 47 kDa.

Positive Controls: LNCaP cell lysate: sc-2231.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 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.

DATA



UPIIIa (H-180): sc-33570. Western blot analysis of UPIIIa expression in LNCaP whole cell lysate.

SELECT PRODUCT CITATIONS

- Lüthje, P., et al. 2013. Estrogen supports urothelial defense mechanisms. *Sci. Transl. Med.* 5: 190ra80.

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.

MONOS
Satisfaction
Guaranteed

Try **UPIIIa (C-6): sc-166808** or **UPIIIa (F-11): sc-166598**, our highly recommended monoclonal alternatives to UPIIIa (H-180).