BACKGROUND

The keratin multigene family is made of “soft” epithelial cytokeratins and “hard” hair keratins. While the epithelial cytokeratins are involved in the layering and formation of epithelia, the hair keratins are responsible for creating nails and hair. There are two types of keratins: the acidic class I keratin proteins and the basic/neutral class II keratin proteins. Keratin 2 (KRT2), also known as Keratin type II cytoskeletal 2 epidermal, Keratin-2e (K2e), KRTE, Cytokeratin-2e (CK-2e), KRT2A or KRT2E, is a 639 amino acid class II epithelial Keratin protein belonging to the intermediate filament family. Encoded by a gene that maps to human chromosome 12q13.13, Keratin 2 functions in epidermal keratinocyte activation and proliferation, and plays a part in terminal cornification. Highly expressed in upper epithelial tissues, Keratin 2 forms heterotetramers with two class I Keratins and another class II Keratin. Defects in Keratin 2 have been linked to ichthyosis bullosa of Siemens (IBS), a rare autosomal dominant skin disorder.

REFERENCES


CHROMOSOMAL LOCATION


SOURCE

Keratin 2 (V-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Keratin 2 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-132312 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Keratin 2 (V-12) is recommended for detection of Keratin 2 of 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 other Keratin family members.

Suitable for use as control antibody for Keratin 2 siRNA (h): sc-95659, Keratin 2 shRNA Plasmid (h): sc-95659-SH and Keratin 2 shRNA (h) Lentiviral Particles: sc-95659-V.

Molecular Weight of Keratin 2: 65 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.