

## $\beta$ ig-h3 (N-15): sc-14741

### BACKGROUND

Human  $\beta$  ig-h3 ( $\alpha 3/\beta 1$  Integrin, keratoepithelin) is a secreted, 683-amino acid, transforming growth factor-inducible, extracellular matrix adhesion molecule.  $\beta$  ig-h3 contains an amino-terminal secretory sequence and a carboxy-terminal Integrin-binding Arg-Gly-Asp (RGD) domain.  $\beta$  ig-h3 is implicated in mechanisms leading to proliferation, differentiation, wound healing and morphogenesis of corneal tissues. Mutations in the  $\beta$  ig-h3 gene, along with elevated levels of  $\beta$  ig-h3 protein in human corneas, occurs with granular dystrophy (GCD) and other inherited disorders of the cornea.  $\beta$  ig-h3 is also a structural component of the human bladder extracellular matrix and may influence nuclear regulatory or structural functions.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: TGFBI (human) mapping to 5q31.1; Tgfbi (mouse) mapping to 13 B1.

### SOURCE

$\beta$  ig-h3 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of  $\beta$  ig-h3 of human origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-14741 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

$\beta$  ig-h3 (N-15) is recommended for detection of  $\beta$  ig-h3 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).

$\beta$  ig-h3 (N-15) is also recommended for detection of  $\beta$  ig-h3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for  $\beta$  ig-h3 siRNA (h): sc-43123,  $\beta$  ig-h3 siRNA (m): sc-43124,  $\beta$  ig-h3 shRNA Plasmid (h): sc-43123-SH,  $\beta$  ig-h3 shRNA Plasmid (m): sc-43124-SH,  $\beta$  ig-h3 shRNA (h) Lentiviral Particles: sc-43123-V and  $\beta$  ig-h3 shRNA (m) Lentiviral Particles: sc-43124-V.

Molecular Weight of  $\beta$  ig-h3: 68 kDa.

Positive Controls: Y79 cell lysate: sc-2240.

### 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](http://www.scbt.com) or our catalog for detailed protocols and support products.