# suprabasin (D-13): sc-240928



The Power to Question

#### **BACKGROUND**

Suprabasin (SBSN) is a 247 amino acid secreted protein that is upregulated in differentiating keratinocytes and is though to play a role in epidermal differentiation. Expressed in uterus, skin, thymus and esophagus, suprabasin is encoded by a gene that maps to human chromosome 19q13.12. Chromosome 19 consists of about 63 million bases with over 1,400 genes, making up over 2% of human genomic DNA. Chromosome 19 is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte lg-like receptors, a number of ICAMs, the CEACAM and PSG families, and Fc $\alpha$  receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19.

## **REFERENCES**

- Olsen, A., et al. 1994. Gene organization of the pregnancy-specific glycoprotein region on human chromosome 19: assembly and analysis of a 700-kb cosmid contig spanning the region. Genomics 23: 659-668.
- 2. Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. Immunol. Rev. 181: 20-38.
- Park, G.T., et al. 2002. Suprabasin, a novel epidermal differentiation marker and potential cornified envelope precursor. J. Biol. Chem. 277: 45195-45202.
- Le Meur, N., et al. 2004. Complete germline deletion of the STK11 gene in a family with Peutz-Jeghers syndrome. Eur. J. Hum. Genet. 12: 415-418.
- 5. Moffatt, P., et al. 2004. Identification of a conserved cluster of skin-specific genes encoding secreted proteins. Gene 334: 123-131.
- Leeb, T., et al. 2004. Comparative human-mouse-rat sequence analysis of the ICAM gene cluster on HSA 19p13.2 and a 185-kb porcine region from SSC 2q. Gene 343: 239-244.
- 7. Matsui, T., et al. 2004. Identification of novel keratinocyte-secreted peptides dermokine- $\alpha$ /- $\beta$  and a new stratified epithelium-secreted protein gene complex on human chromosome 19q13.1. Genomics 84: 384-397.

#### CHROMOSOMAL LOCATION

Genetic locus: SBSN (human) mapping to 19q13.12.

# SOURCE

suprabasin (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of suprabasin of human origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-240928 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **RESEARCH USE**

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

#### **APPLICATIONS**

suprabasin (D-13) is recommended for detection of suprabasin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Suitable for use as control antibody for suprabasin siRNA (h): sc-97178, suprabasin shRNA Plasmid (h): sc-97178-SH and suprabasin shRNA (h) Lentiviral Particles: sc-97178-V.

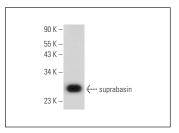
Molecular Weight of suprabasin: 25 kDa.

Positive Controls: human esophagus extract: sc-363760.

#### **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



suprabasin (D-13): sc-240928. Western blot analysis of suprabasin expression in human esophagus tissue

#### **STORAGE**

Store at  $4^{\circ}$  C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.



Try **suprabasin (H-9): sc-515037**, our highly recommended monoclonal alternative to suprabasin (D-13).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com