

# suprabasin (H-9): sc-515037

## BACKGROUND

Suprabasin (SBSN) is a 247 amino acid secreted protein that is upregulated in differentiating keratinocytes and is thought 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 Ig-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

1. 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.

## CHROMOSOMAL LOCATION

Genetic locus: SBSN (human) mapping to 19q13.12; Sbsn (mouse) mapping to 7 B1.

## SOURCE

suprabasin (H-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 219-231 near the C-terminus of suprabasin of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG $_1$  lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

suprabasin (H-9) is available conjugated to agarose (sc-515037 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515037 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515037 PE), fluorescein (sc-515037 FITC), Alexa Fluor<sup>®</sup> 488 (sc-515037 AF488), Alexa Fluor<sup>®</sup> 546 (sc-515037 AF546), Alexa Fluor<sup>®</sup> 594 (sc-515037 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-515037 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-515037 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-515037 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515037 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## STORAGE

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

## APPLICATIONS

suprabasin (H-9) is recommended for detection of suprabasin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 siRNA (m): sc-153932, suprabasin shRNA Plasmid (h): sc-97178-SH, suprabasin shRNA Plasmid (m): sc-153932-SH, suprabasin shRNA (h) Lentiviral Particles: sc-97178-V and suprabasin shRNA (m) Lentiviral Particles: sc-153932-V.

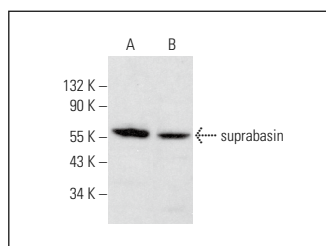
Molecular Weight of suprabasin: 61/25 kDa.

Positive Controls: U-87 MG cell lysate: sc-2411, T98G cell lysate: sc-2294 or SCC-4 whole cell lysate: sc-364363.

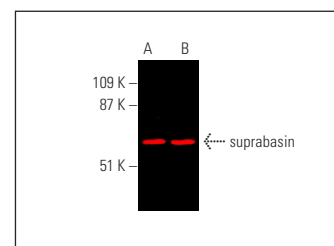
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\lambda$  BP-HRP: sc-516132 or m-IgG $\lambda$  BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 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 m-IgG $\lambda$  BP-FITC: sc-516185 or m-IgG $\lambda$  BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



suprabasin (H-9): sc-515037. Western blot analysis of suprabasin expression in U-87 MG (A) and P19 (B) whole cell lysates.



suprabasin (H-9): sc-515037. Near-infrared western blot analysis of suprabasin expression in T98G (A) and SCC-4 (B) whole cell lysates. Detection reagent used: m-IgG $\lambda$  BP-CFL 790: sc-516195.

## SELECT PRODUCT CITATIONS

1. Takahashi, K., et al. 2020. Sox2 induces tumorigenesis and angiogenesis of early stage esophageal squamous cell carcinoma through secretion of suprabasin. *Carcinogenesis* 41: 1543-1552.

## RESEARCH USE

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