# basonuclin (H-16): sc-13259



The Power to Question

## **BACKGROUND**

The zinc finger protein basonuclin is a putative rDNA transcription factor with highly restricted tissue distribution. Basonuclin is abundantly expressed in keratinocytes of the basal layer of the epidermis, the outer sheath of hair follicles and the germ cells of the testis and ovary. Although basonuclin is associated with chromatin throughout the cell cycle, including mitosis, it disappears when cells become post-mitotic. In the epidermis, basonuclin, which is mainly localized to the cytoplasm, translocates to basal cell nuclei during different stages of keratinocyte growth. Basonuclin may enhance rRNA synthesis by elevating transcription from an rDNA promoter and inhibiting RNA polymerase I transcription through its zinc finger domain. Therefore, basonuclin may be a cell-type-specific transcription factor for rDNA transcription.

# **CHROMOSOMAL LOCATION**

Genetic locus: BNC1 (human) mapping to 15q25.2; Bnc1 (mouse) mapping to 7 D3.

#### SOURCE

basonuclin (H-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of basonuclin 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-13259 X, 200  $\mu g$ /0.1 ml.

Blocking peptide available for competition studies, sc-13259 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

basonuclin (H-16) is recommended for detection of basonuclin of mouse, rat and 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), immunohistochemistry (including paraffin-embedded sections) (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 basonuclin siRNA (h): sc-37708, basonuclin siRNA (m): sc-37709, basonuclin shRNA Plasmid (h): sc-37708-SH, basonuclin shRNA Plasmid (m): sc-37709-SH, basonuclin shRNA (h) Lentiviral Particles: sc-37708-V and basonuclin shRNA (m) Lentiviral Particles: sc-37709-V.

basonuclin (H-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

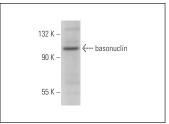
Molecular Weight of basonuclin: 120 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132.

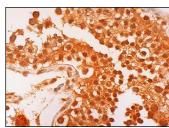
#### **RECOMMENDED SECONDARY REAGENTS**

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## **DATA**



basonuclin (H-16): sc-13259. Western blot analysis of basonuclin expression in Jurkat nuclear extract.



basonuclin (H-16): sc-13259. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts and Leydig cells.

## **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.



Try **basonuclin (1F4): sc-517114**, our highly recommended monoclonal alternative to basonuclin (H-16).

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