

BNC1 Rabbit pAb

Catalog # AP97250

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q01954
Other Accession	Q01954
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	110972
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human BNC1
Epitope Specificity	1-100/944
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 6 C2H2-type zinc fingers.
Post-translational modifications	Phosphorylation on Ser-537 and Ser-541 leads to cytoplasmic localization.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

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

Additional Information

Gene ID	646
Other Names	BNC; BSN1; HsT19447; POF16; bn1; BNC1_HUMAN; BNC1; basонуclin zinc finger protein 1; basонуclin; basонуclin 1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	BNC1
Synonyms	BNC
Function	Transcriptional activator (By similarity). It is likely involved in the regulation of keratinocytes terminal differentiation in squamous epithelia and hair follicles (PubMed: 8034748). Required for the maintenance of spermatogenesis (By similarity). It is involved in the positive regulation of oocyte maturation, probably acting through the control of BMP15 levels and regulation of AKT signaling cascade (PubMed: 30010909). May also play a role in the early development of embryos (By similarity).
Cellular Location	Nucleus. Cytoplasm Nucleus, nucleoplasm. Note=Relocates to the midpiece of the flagellum during late spermiogenesis in spermatids {ECO:0000250 UniProtKB:O35914}
Tissue Location	In epidermis, primarily detected in cells of the basal or immediately suprabasal layers (at protein level) (PubMed:16891417). In hair follicles, mainly expressed in the outer root sheath (at protein level) (PubMed:8034748). Expressed in epidermis, testis and foreskin, and to a lower extent in thymus, spleen, mammary glands, placenta, brain and heart (PubMed:9687312) Expressed in the ovary, notably in oocytes (PubMed:30010909)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.