10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# BNC1 Rabbit pAb

Catalog # AP97498

## Product Information

| | |
|---|---|
| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | Q01954 |
| **Other Accession** | Q01954 |
| **Reactivity** | Rat, Mouse |
| **Predicted** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 110972 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human BNC1 |
| **Epitope Specificity** | 211-310/994 |
| **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, 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 in 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. |

## Additional Information

| | |
|---|---|
| **Gene ID** | 646 |
| **Other Names** | BNC; BSN1; HsT19447; POF16; bn1; BNC1_HUMAN; BNC1; basonuclin zinc finger protein 1; basonuclin; basonuclin 1 |
| **Dilution** | IHC-P=1:100-500,IHC-F=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'.