

# **BANP Antibody**

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8526b

#### **Product Information**

Application WB, IHC-P, E Primary Accession Q8N9N5

**Reactivity** Human, Rat, Mouse

HostMouseClonalitymonoclonalIsotypeIgG1,κ

**Clone Names** 1524CT337.6.32

Calculated MW 56494

### **Additional Information**

**Gene ID** 54971

**Other Names** Protein BANP, BEN domain-containing protein 1, Btg3-associated nuclear

protein, Scaffold/matrix-associated region-1-binding protein, BANP, BEND1,

SMAR1

**Target/Specificity** This BANP antibody is generated from a mouse immunized with a

recombinant protein between 30-390 amino acids from human BANP.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

**Format** Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein G column, followed by dialysis

against PBS.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** BANP Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

### **Protein Information**

Name BANP

Synonyms BEND1, SMAR1

**Function** Controls V(D)J recombination during T-cell development by repressing T-cell

receptor (TCR) beta enhancer function (By similarity). Binds to scaffold/matrix attachment region beta (S/MARbeta), an ATC-rich DNA sequence located

upstream of the TCR beta enhancer (By similarity). Represses cyclin D1 transcription by recruiting HDAC1 to its promoter, thereby diminishing H3K9ac, H3S10ph and H4K8ac levels (PubMed:16166625). Promotes TP53 activation, which causes cell cycle arrest (By similarity). Plays a role in the regulation of alternative splicing (PubMed:26080397). Binds to CD44 pre-mRNA and negatively regulates the inclusion of CD44 proximal variable exons v2-v6 but has no effect on distal variable exons v7-v10 (PubMed:26080397).

**Cellular Location** Nucleus. Nucleus speckle. Cytoplasm Note=Primarily nuclear but translocates

to the cytoplasm following MAPK1/MAPK3-mediated phosphorylation.

**Tissue Location** Down-regulated in breast cancer cell lines.

## **Background**

Controls V(D)J recombination during T-cell development by repressing T-cell receptor (TCR) beta enhancer function. Binds to scaffold/matrix attachment region beta (S/MARbeta), an ATC-rich DNA sequence located upstream of the TCR beta enhancer. Represses cyclin D1 transcription by recruiting HDAC1 to its promoter, thereby diminishing H3K9ac, H3S10ph and H4K8ac levels. Promotes TP53 'Ser-15' phosphorylation and nuclear accumulation, which causes cell cycle arrest (By similarity).

### References

Ota T., et al. Nat. Genet. 36:40-45(2004).

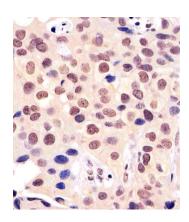
Martin J., et al. Nature 432:988-994(2004).

Birot A.-M., et al. Gene 253:189-196(2000).

Rampalli S., et al. Mol. Cell. Biol. 25:8415-8429(2005).

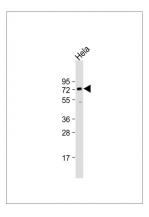
Olsen J.V., et al. Sci. Signal. 3:RA3-RA3(2010).

## **Images**



AM8526b staining BANP in human breast carcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

Anti-BANP Antibody at 1:1000 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 56 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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