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BANP Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8526b

Specification

BANP Antibody - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q8N9N5
Reactivity	**Human**
Host	**Mouse**
Clonality	**monoclonal**
Isotype	**IgG1,κ**
Calculated MW	**56494**

BANP Antibody - 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~~1:25
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.

BANP Antibody - 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.

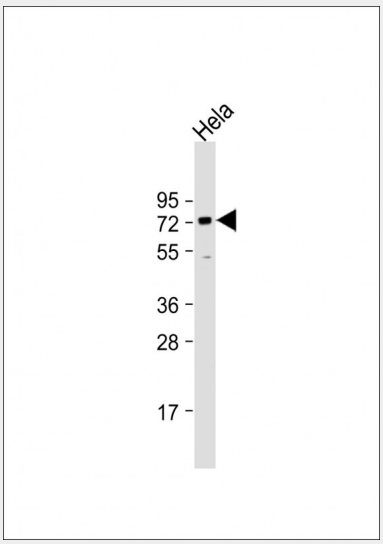
Tissue Location
Down-regulated in breast cancer cell lines.

BANP Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BANP Antibody - Images



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.

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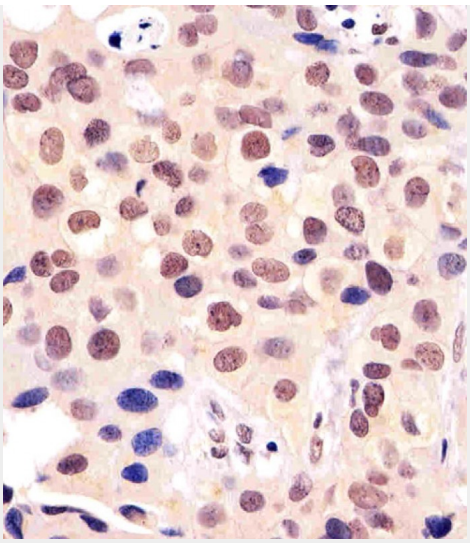

AM8526b staining BANP in human breast carcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (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.

BANP Antibody - 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).

BANP Antibody - 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).