

## BANF1 Antibody

*BANF1 (NT): Barrier to autointegration factor 1, BAF, breakpoint cluster region protein 1*

**CATALOG No.:4019**

### BACKGROUND:

Barrier-to-autointegration factor 1 (BANF1) is a conserved chromatin protein that non-specifically binds double-stranded DNA (1). BANF1 also interacts with a family of nuclear proteins that include LAP2, emerlin, and MAN1 (2). It is also a host cell component of retroviral pre-integration complexes (PICs), including that of HIV (3). BANF1 will bind to p55 Gag (the structural precursor of HIV-1 virions) as well as its cleaved product matrix. In addition to being a host cell component of the PIC, it is thought that BANF1 is also present at low levels in incoming virions, and thus might contribute to the assembly or activity of HIV-1 PICs through direct binding to matrix as well as DNA (4). Despite its predicted molecular weight, BANF1 often migrates at a higher size in SDS-PAGE.

### SOURCE:

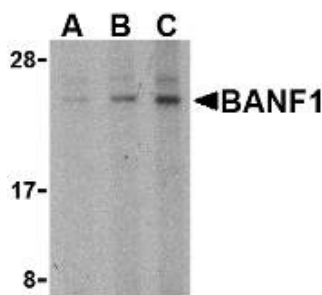
Rabbit polyclonal BANF1 antibody was raised against a 19 amino acid peptide from near the amino terminus of human BANF1 (GenBank accession no. AAH05942).

### APPLICATION:

BANF1 antibody can be used for detection of BANF1 by Western blot at 0.5 – 1 µg/ml. (Optimal dilution should be determined by user.) Mouse kidney tissue lysate can be used as positive control. BANF1 antibody is human, mouse and rat reactive. **For research use only.**

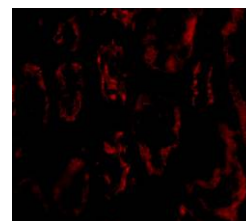
### STORAGE:

BANF1 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of BANF1 in mouse kidney tissue lysate with BANF1 antibody at (A) 0.5, (B) 1 and (C) 2 µg/ml.

Immunofluorescence of BANF1 in human kidney tissue with BANF1 antibody at 20 µg/ml.



### RELATED PRODUCTS:

Blocking Peptide, Catalog No. **4019P**.  
Mouse Kidney Tissue Lysate, Catalog No. **1405**.  
BANF1 Antibody (CT), Catalog No. **4017**.  
Emerin Antibody, Catalog No. **4031**.

### REFERENCES:

1. Furukawa K. LAP2 binding protein 1 (L2BP1/BAF) is a candidate mediator of LAP2-chromatin interaction. *J. Cell Sci.* 1999; 112:2485-92.
2. Cai M, Huang Y, Ghirlando R, et al. Solution structure of the constant region of nuclear envelope protein LAP2 reveals two LEM-domain structures: one binds BAF and the other binds DNA. *EMBO J.* 2001; 20:4399-407.
3. Chen H and Engelman A. The barrier-to-autointegration protein is a host factor for HIV type 1 integration. *Proc. Natl. Acad. Sci. USA* 1998; 95:15270-4.
4. Mansharamani M, Graham DRM, Monie D, et al. Barrier-to-autointegration factor BAF binds p55 gag and matrix and is a host component to human immunodeficiency virus Type I virions. *J. Virol.* 2003; 77:13084-92.

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