



## Anti-BANF1 (NT)

(Barrier to autointegration factor 1, BAF, breakpoint cluster region protein 1)

CATALOG NO.: 54642

### 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, emerin, 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 & REACTIVITY:

Rabbit polyclonal anti-BANF1 was raised against a 19 amino acid peptide from near the amino terminus of human BANF1 (GenBank accession no. AAH05942). Anti-BANF1 is human, mouse, and rat reactive.

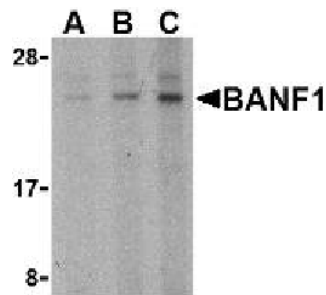
### APPLICATION:

The following concentration ranges are recommended starting points for this product.

**WB:** 0.5-1.0 µg/ml

**IF:** 20 µg/ml

Positive Control: Mouse kidney tissue lysate



Western blot analysis of BANF1 in mouse kidney tissue lysate with anti-BANF1 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



*This product is for in vitro research purposes only.*

### RELATED PRODUCTS:

Anti-BANF1 (CT), Catalog No. **54641**

Anti-Emerin, Catalog No. **54648**

### STORAGE:

The antibody is supplied as purified IgG, 50 µg in 250 µl of 1X PBS containing 0.02% sodium azide. Store at 4 °C for up to one year. Avoid repeated freezing and thawing.

### REFERENCES:

1. Furukawa K (1999) *J. Cell Sci.* 112:2485-92.
2. Cai M, et al (2001) *EMBO J.* 20:4399-407.
3. Chen H, et al (1998) *Proc. Natl. Acad. Sci. USA.* 95:15270-4.
4. Mansharamani M, et al (2003) *J. Virol.* 77:13084-92.