

**BANF1 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP54891****Specification**

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**BANF1 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">075531</a>
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	10059

**BANF1 Polyclonal Antibody - Additional Information****Gene ID** 8815**Other Names**

Barrier-to-autointegration factor, Breakpoint cluster region protein 1, Barrier-to-autointegration factor, N-terminally processed, BANF1, BAF, BCRG1

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**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.

**BANF1 Polyclonal Antibody - Protein Information****Name** BANF1 {ECO:0000303|PubMed:21549337, ECO:0000312|HGNC:HGNC:17397}**Function**

Non-specific DNA-binding protein that plays key roles in mitotic nuclear reassembly, chromatin organization, DNA damage response, gene expression and intrinsic immunity against foreign DNA (PubMed:<a href="http://www.uniprot.org/citations/10908652" target="\_blank">10908652</a>, PubMed:<a href="http://www.uniprot.org/citations/11792822" target="\_blank">11792822</a>, PubMed:<a href="http://www.uniprot.org/citations/12163470" target="\_blank">12163470</a>, PubMed:<a href="http://www.uniprot.org/citations/18005698" target="\_blank">18005698</a>, PubMed:<a href="http://www.uniprot.org/citations/25991860" target="\_blank">25991860</a>, PubMed:<a href="http://www.uniprot.org/citations/28841419" target="\_blank">28841419</a>, PubMed:<a href="http://www.uniprot.org/citations/31796734" target="\_blank">31796734</a>, PubMed:<a href="http://www.uniprot.org/citations/32792394" target="\_blank">32792394</a>). Contains two non-specific double-stranded DNA (dsDNA)-binding sites which promote DNA cross-bridging (PubMed:<a href="http://www.uniprot.org/citations/9465049" target="\_blank">9465049</a>). Plays a key role in nuclear membrane reformation at the end of mitosis by driving formation of a single nucleus in a spindle-independent manner (PubMed:<a href="http://www.uniprot.org/citations/28841419" target="\_blank">28841419</a>). Transiently

cross-bridges anaphase chromosomes via its ability to bridge distant DNA sites, leading to the formation of a dense chromatin network at the chromosome ensemble surface that limits membranes to the surface (PubMed:<a href="http://www.uniprot.org/citations/28841419" target="\_blank">28841419</a>). Also acts as a negative regulator of innate immune activation by restricting CGAS activity toward self-DNA upon acute loss of nuclear membrane integrity (PubMed:<a href="http://www.uniprot.org/citations/32792394" target="\_blank">32792394</a>). Outcompetes CGAS for DNA-binding, thereby preventing CGAS activation and subsequent damaging autoinflammatory responses (PubMed:<a href="http://www.uniprot.org/citations/32792394" target="\_blank">32792394</a>). Also involved in DNA damage response: interacts with PARP1 in response to oxidative stress, thereby inhibiting the ADP-ribosyltransferase activity of PARP1 (PubMed:<a href="http://www.uniprot.org/citations/31796734" target="\_blank">31796734</a>). Involved in the recognition of exogenous dsDNA in the cytosol: associates with exogenous dsDNA immediately after its appearance in the cytosol at endosome breakdown and is required to avoid autophagy (PubMed:<a href="http://www.uniprot.org/citations/25991860" target="\_blank">25991860</a>). In case of poxvirus infection, has an antiviral activity by blocking viral DNA replication (PubMed:<a href="http://www.uniprot.org/citations/18005698" target="\_blank">18005698</a>).

### **Cellular Location**

Nucleus. Chromosome. Nucleus envelope. Cytoplasm. Note=Significantly enriched at the nuclear inner membrane, diffusely throughout the nucleus during interphase and concentrated at the chromosomes during the M-phase (PubMed:16495336, PubMed:24600006). The phosphorylated form (by VRK1) shows a cytoplasmic localization whereas the unphosphorylated form locates almost exclusively in the nucleus (PubMed:16495336, PubMed:24600006). May be included in HIV-1 virions via its interaction with viral GAG polyprotein (PubMed:14645565)

### **Tissue Location**

Widely expressed. Expressed in colon, brain, heart, kidney, liver, lung, ovary, pancreas, placenta, prostate, skeletal muscle, small intestine, spleen and testis. Not detected in thymus and peripheral blood leukocytes.

## **BANF1 Polyclonal 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 Cytometry](#)
- [Cell Culture](#)

## **BANF1 Polyclonal Antibody - Images**