ARG42788
anti-BANF1 / BAF antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes BANF1 / BAF
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	BANF1 / BAF
Species	Human
Immunogen	Synthetic peptide derived from Human BANF1 / BAF.
Conjugation	Un-conjugated
Alternate Names	BCRP1; Breakpoint cluster region protein 1; BAF; NGPS; Barrier-to-autointegration factor; D14S1460

Application Instructions

Application table

Application	Dilution
FACS	1:100
ICC/IF	1:50 - 1:200
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HeLa
Observed Size	~ 10 kDa

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	BANF1
Gene Full Name	barrier to autointegration factor 1
Background	The protein encoded by this gene was first identified by its ability to protect retroviruses from intramolecular integration and therefore promote intermolecular integration into the host cell genome. The protein forms a homodimer which localizes to both the nucleus and cytoplasm and is specifically associated with chromosomes during mitosis. This protein binds to double stranded DNA in a non-specific manner and also binds to LEM-domain containing proteins of the nuclear envelope. This protein is thought to facilitate nuclear reassembly by binding with both DNA and inner nuclear membrane proteins and thereby recruit chromatin to the nuclear periphery. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq, Jan 2009]
Function	Plays fundamental roles in nuclear assembly, chromatin organization, gene expression and gonad development. May potently compress chromatin structure and be involved in membrane recruitment and chromatin decondensation during nuclear assembly. Contains 2 non-specific dsDNA-binding sites which may promote DNA cross-bridging. (Microbial infection) Exploited by retroviruses for inhibiting self-destructing autointegration of retroviral DNA, thereby promoting integration of viral DNA into the host chromosome. EMD and BAF are cooperative cofactors of HIV-1 infection. Association of EMD with the viral DNA requires the presence of BAF and viral integrase. The association of viral DNA with chromatin requires the presence of BAF and EMD. (Microbial infection) In case of poxvirus infection, has an antiviral activity by blocking viral DNA replication. [UniProt]
Calculated Mw	10 kDa
PTM	Ser-4 is the major site of phosphorylation as compared to Thr-2 and Thr-3. Phosphorylation on Thr-2; Thr-3 and Ser-4 disrupts its ability to bind DNA and reduces its ability to bind LEM domain-containing proteins. Non phosphorylated BAF seems to enhance binding between EMD and LMNA. Dephosphorylated by protein phosphatase 2A (PP2A) following interaction with ANKLE2/LEM4 during mitotic exit, leading to mitotic nuclear envelope reassembly. [UniProt]
Cellular Localization	Barrier-to-autointegration factor: Nucleus. Cytoplasm. Chromosome. Nucleus envelope. Note=Significantly enriched at the nuclear inner membrane, diffusely throughout the nucleus during interphase and concentrated at the chromosomes during the M-phase. The phosphorylated form shows a cytoplasmic localization whereas the unphosphorylated form locates almost exclusively in the nucleus. May be included in HIV-1 virions via its interaction with viral GAG polyprotein. [UniProt]

Images

ARG42788 anti-BANF1 / BAF antibody WB image

Western blot: HeLa cell lysate stained with ARG42788 anti-BANF1 / BAF antibody.