10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BFAR Antibody

Catalog # ASC11060

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9NZS9
Other Accession	NP_057645, 7706091
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	52738
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	BFAR antibody can be used for detection of BFAR by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	51283
Other Names	Bifunctional apoptosis regulator, RING finger protein 47, BFAR, BAR, RNF47
Target/Specificity	BFAR;
Reconstitution & Storage	BFAR antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	BFAR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BFAR
Synonyms	BAR, RNF47
Function	Membrane-bound E3 ubiquitin ligase that plays a role in several processes including apoptosis regulation or reticulum endoplasmic stress (PubMed:14502241, PubMed:21068390). Has anti- apoptotic activity, both for apoptosis triggered via death-receptors and via mitochondrial factors (PubMed:14502241). Contributes to the dynamic control of IRE1/ERN1 signaling during ER stress by inducing BAX inhibitor 1/TMBIM6 proteasomal degradation (PubMed:21068390). Promotes the activation of TGF-beta signaling by mediating the 'Lys-63'-linked ubiquitination of TGFBR1 which is

	critical to activate the pathway (PubMed:33914044). Together with NGFR, negatively regulates NF-kappa-B and JNK-related signaling pathways (PubMed:22566094). Promotes the proteasome-mediated degradation of PNPLA3, a protein involveld in lipid metabolism (PubMed:38294943).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein
Tissue Location	Expressed highly in brain, moderately in small intestine, weakly in testes and only faintly in liver and skeletal muscle. Not expressed in heart, kidney, lung and spleen

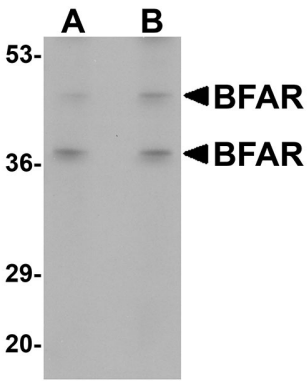
Background

BFAR Antibody: The bifunctional apoptosis inhibitor (BFAR) is scaffold protein that integrates signaling components of the cells apoptosis-regulatory machinery. BFAR is a multidomain protein capable of inhibiting apoptosis induced by TNF-family death receptors ('extrinsic pathway') as well as mitochondria-dependent apoptosis ('intrinsic pathway'). Interaction of BFAR with Bcl-2 or Bcl-XL via a SAM domain may contribute to the anti-apoptotic properties of BFAR. In addition, BFAR contains a DED-like domain that is capable of suppressing apoptosis mediated at the receptor level. BFAR is also thought to be involved in the regulation of neuronal survival.

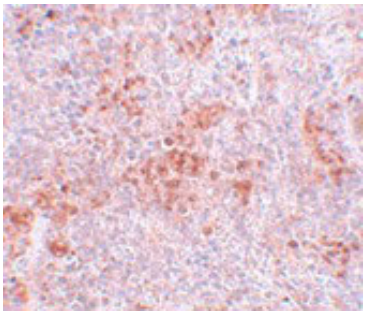
References

Zhang H, Xu Q, Krajewski S, et al. BAR: an apoptosis regulator at the intersection of caspases and Bcl-2 family proteins. Proc. Natl. Acad. Sci. USA2000; 97:2597-602.
Roth W, Kermer P, Krajewska M, et al. Bifunctional apoptosis inhibitor (BAR) protects neurons from diverse cell death pathways. Cell Death Differ. 2003; 10: 1178-87.

Images

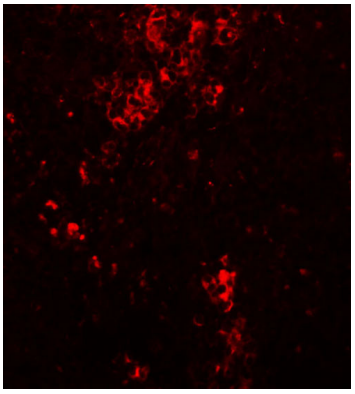


Western blot analysis of BFAR in human kidney tissue lysate with BFAR antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of BFAR in mouse kidney tissue with BFAR antibody at 5 µg/mL.

Immunofluorescence of BFAR in mouse kidney tissue



with BFAR antibody at 20 µg/mL.