

# BFAR Antibody

Catalog # ASC11060

## Specification

# **BFAR Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes

WB, IHC-P, IF, E <u>O9NZS9</u> <u>NP\_057645</u>, <u>7706091</u> Human, Mouse, Rat Rabbit Polyclonal IgG BFAR antibody can be used for detection of BFAR by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 5 μg/mL. For immunofluorescence start at 20 μg/mL.

# BFAR Antibody - Additional Information

Gene ID Target/Specificity BFAR;

51283

## **Reconstitution & Storage**

BFAR antibody can be stored at 4°C for three months and -20°C, 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.

# **BFAR Antibody - 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:<a

href="http://www.uniprot.org/citations/14502241" target="\_blank">14502241</a>, PubMed:<a href="http://www.uniprot.org/citations/21068390" target="\_blank">21068390</a>). Has anti-apoptotic activity, both for apoptosis triggered via death-receptors and via mitochondrial factors (PubMed:<a href="http://www.uniprot.org/citations/14502241" target="\_blank">14502241</a>). Has anti-apoptotic activity, both for apoptosis triggered via death-receptors and via mitochondrial factors (PubMed:<a href="http://www.uniprot.org/citations/14502241" target="\_blank">14502241</a>). Contributes to the dynamic control of IRE1/ERN1 signaling during ER stress by inducing BAX inhibitor 1/TMBIM6 proteasomal degradation (PubMed:<a

href="http://www.uniprot.org/citations/21068390" target="\_blank">21068390</a>). Promotes the



activation of TGF-beta signaling by mediating the 'Lys-63'-linked ubiquitination of TGFBR1 which is critical to activate the pathway (PubMed:<a href="http://www.uniprot.org/citations/33914044" target="\_blank">33914044</a>). Together with NGFR, negatively regulates NF-kappa-B and JNK-related signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/22566094" target="\_blank">22566094</a>). Promotes the proteasome-mediated degradation of PNPLA3, a protein involveld in lipid metabolism (PubMed:<a

href="http://www.uniprot.org/citations/38294943" target="\_blank">38294943</a>).

#### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein

#### **Tissue Location**

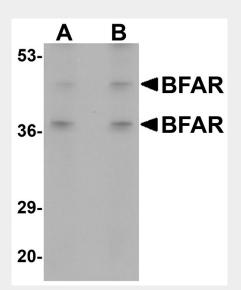
Expressed highly in brain, moderately in small intestine, weakly in testes and only faintly in liver and skeletal muscle. Not expressed in heart, kidney, lung and spleen

## **BFAR Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

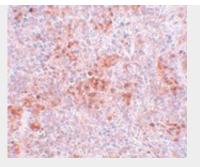
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## **BFAR Antibody - Images**

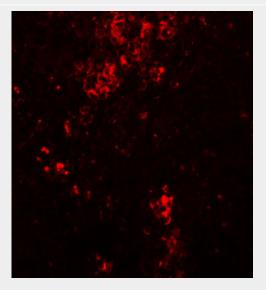


Western blot analysis of BFAR in human kidney tissue lysate with BFAR antibody at (A) 1 and (B) 2  $\mu$ g/mL.





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.

# BFAR Antibody - 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.

## **BFAR Antibody - 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.