

## 20-1021: Polyclonal antibody to BFAR (BAR)

|                                |   |
|--------------------------------|---|
| <b>Clonality :</b>             | Polyclonal  |
| <b>Application :</b>           | IP,IHC,WB   |
| <b>Reactivity :</b>            | Human   |
| <b>Gene :</b>                  | BFAR  |
| <b>Gene ID :</b>               | 51283   |
| <b>Uniprot ID :</b>            | Q9NZS9  |
| <b>Format :</b>                | Sera  |
| <b>Alternative Name :</b>      | BFAR,BAR,RNF47  |
| <b>Isotype :</b>               | Rabbit IgG  |
| <b>Immunogen Information :</b> | A recombinant protein of human BFAR (BAR) (amino acids 1-139) was used as immunogen for this antibody |

### Description

BAR (bifunctional apoptosis regulator) is a multidomain protein that was originally identified as an inhibitor of Bax-induced apoptosis. BAR is anchored in intracellular membranes and is thought to be a scaffold protein that may bridge components of both extrinsic and intrinsic apoptosis pathways through its antiapoptotic domains: 1. BAR contains a DED (death effector domain)-like protein interaction domain that suppresses death receptor apoptosis signaling pathways. BAR is highly expressed in the brain and expression patterns as well as functional data with neuronal cell lines suggest that BAR is involved in regulating neuronal survival. Additionally, subcellular localization studies indicate that BAR predominantly localizes to the endoplasmic reticulum (ER), irrespective of cell type. Bcl-2 family proteins also localize to the ER. There is important crosstalk between the ER and mitochondria in the execution of cell death. It is thought that both BAR and Bcl-2 proteins play a role in regulating cell death/apoptosis induced by ER stress. Dysregulation of ER homeostasis and apoptosis is thought to be involved in the pathogenesis of some human neuronal diseases, including Alzheimers, Parkinsons, polyglutamine diseases, neuronal storage diseases, prion diseases, as well as acute neurodegeneration from brain trauma. Since BAR is normally widely expressed in the brain, it may have a cytoprotective function in helping neurons to survive for the entire lifetime of the organism by playing a central role in inhibiting ER initiated apoptosis.

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 50 $\mu$ l  |
| <b>Content :</b>           | 50 $\mu$ l sera   |
| <b>Storage condition :</b> | Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles. |

### Application Note

WB: 1:1000-1:2000, IHC (paraffin): 1:1000-1:5000, IHC (frozen): Users should optimize, IP: 1:50-1:200

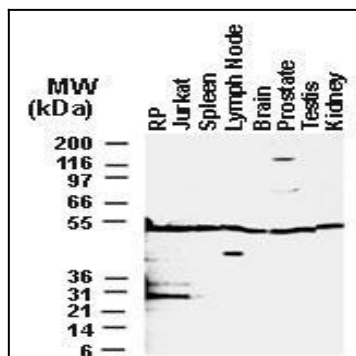


Fig:1 Western blot analysis of BAR (20-1021) in cell lines and tissues. 25 ug of total protein was loaded per lane. BAR Recombinant protein (RP) was used as a positive control.

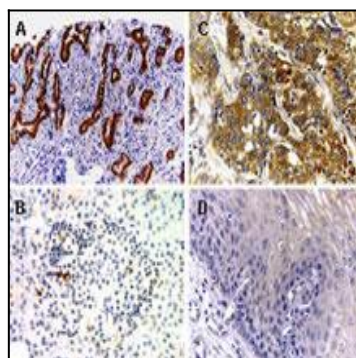


Fig:2 Formalin-fixed, paraffin-embedded sections of tumor and normal human tissues stained for BAR expression using 20-1021 at 1:2000. A. Pancreatic cancer. B. Normal pancreas. C. Esophageal cancer. D. Normal esophagus. Increased expression of BAR was detected in the tumor, compared to normal tissues. Hematoxylin-eosin counterstain.

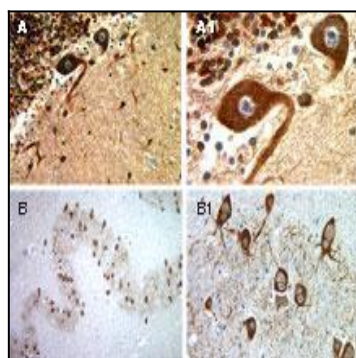


Fig:3 Formalin-fixed, paraffin-embedded tissue sections of normal human brain stained for BAR expression using 20-1021 at 1:2000. A, A1: Cerebellum. B, B1: Medulla. A1 and B1 are higher magnifications of A and B, respectively.