

# BAD Antibody

Catalog # ASC10252

# Specification

# **BAD Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC, IF <u>O92934</u> <u>O92934</u>, <u>17371773</u> Human, Mouse, Rat Rabbit Polyclonal IgG Bad antibody can be used for detection of Bad by Western blot at 0.5 to 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 2 μg/mL. For immunofluorescence start at 10 μg/mL.

# **BAD Antibody - Additional Information**

Gene ID 572 Other Names BAD Antibody: BBC2, BCL2L8, BBC6, Bcl2 antagonist of cell death, Bcl-2-binding component 6, BAD, BCL2-associated agonist of cell death

Target/Specificity BAD;

#### **Reconstitution & Storage**

BAD 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** BAD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **BAD Antibody - Protein Information**

Name BAD

Synonyms BBC6, BCL2L8

#### Function

Promotes cell death. Successfully competes for the binding to Bcl-X(L), Bcl-2 and Bcl-W, thereby affecting the level of heterodimerization of these proteins with BAX. Can reverse the death repressor activity of Bcl-X(L), but not that of Bcl-2 (By similarity). Appears to act as a link between growth factor receptor signaling and the apoptotic pathways.



#### **Cellular Location**

Mitochondrion outer membrane. Cytoplasm {ECO:0000250|UniProtKB:Q61337}. Note=Colocalizes with HIF3A in the cytoplasm (By similarity). Upon phosphorylation, locates to the cytoplasm. {ECO:0000250|UniProtKB:Q61337}

**Tissue Location** 

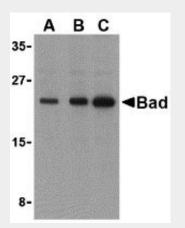
Expressed in a wide variety of tissues.

# **BAD Antibody - Protocols**

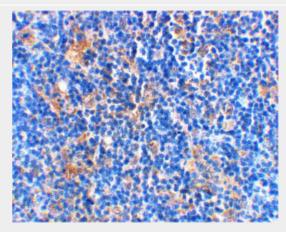
Provided below are standard protocols that you may find useful for product applications.

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

#### **BAD Antibody - Images**

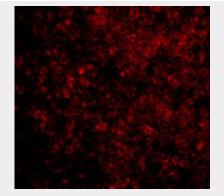


Western blot analysis of Bad in T24 cell lysates with Bad antibody at (A) 0.5, (B) 1, and (C) 2  $\mu$ g/mL.



Immunohistochemical staining of rat thymus using Bad at 2 µg/mL.





Immunofluorescence of BAD in Rat Thymus cells with BAD antibody at 10 µg/mL.

# **BAD Antibody - Background**

BAD Antibody: Members in the Bcl-2 family are critical regulators of apoptosis by either inhibiting or promoting cell death. Bcl-2 homology 3 (BH3) domain containing pro-apoptotic proteins, such as Bax, Bid, and Bik, form a growing subclass of the Bcl-2 family. Another such protein is the Bcl-2-antagonist of cell death (Bad). Bad regulates apoptosis by forming heterodimers with anti-apoptotic proteins Bcl-2 and Bcl-xL, thereby preventing them from binding with Bax. Bad activity is regulated by its phosphorylation; it is inactivated by kinases such as Akt and MAP kinase and thus promotes cell survival, whereas JNK-induced phosphorylation promotes the apoptotic role of Bad.

# **BAD Antibody - References**

Cory S, Huang DCS, and Adams JM. The Bcl-2 family: roles in cell survival and oncogenesis. Oncogene 2003; 22:8590-607.

Heiser D, Labi V, Erlacher M, et al. The Bcl-2 protein family and its role in the development of neoplastic disease. Exp. Geron. 2004; 39:1125-35.

Ottilie S, Diaz JL, Horne W, et al. Dimerization properties of human BAD. Identification of a BH-3 domain and analysis of its binding to mutant BCL-2 and BCL-XL proteins. J. Biol. Chem. 1997; 272:30866-72.

Zhou XM, Liu Y, Payne G, et al. Growth factors inactivate the cell death promoter BAD by phosphorylation of its BH3 domain on Ser155. J. Biol. Chem. 2000; 275:25046-51.