

#2300 Store at -20C

Aven Antibody

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| Applications: W, IF-IC, FC-FP | Reactivity: H M R Mk | Sensitivity: Endogenous | MW (kDa): 50 | Source/Isotype: Rabbit | UniProt ID: #Q9NQS1 | Entrez-Gene Id: 57099 |
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Product Usage Information**Application**

Western Blotting
Immunofluorescence (Immunocytochemistry)
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:50
1:200

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Aven Antibody detects endogenous levels of total Aven protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues at the carboxy terminus of Aven. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The Bcl-2 family regulates apoptosis in response to a wide range of stimuli through control of mitochondrial cytochrome c release and caspase activation (1-3). Cytosolic Apaf-1 forms a complex with caspase-9 in the presence of cytochrome c and dATP, ultimately leading to caspase-9 activation and subsequent activation of caspase-3. A large number of proteins have been found to interact with Bcl-2 and other family members that have been shown to help regulate apoptosis. Aven was identified in a yeast two-hybrid screen as a bcl-x_L interacting protein (4). It also interacts with other anti-apoptotic family members, including Bcl-2, but fails to interact with pro-apoptotic proteins Bax and Bak. Aven inhibits apoptosis and enhances anti-apoptotic activity of Bcl-x_L. It interferes with association with Apaf-1 and activation of caspase-9. Aven overexpression is associated with poor prognosis in acute lymphoblastic leukemia (5,6).

Background References

- Harris, M.H. and Thompson, C.B. (2000) *Cell Death. Differ.* 7, 1182-1191.
- Cory, S. et al. (2003) *Oncogene* 22, 8590-8607.
- Scorrano, L. and Korsmeyer, S.J. (2003) *Biochem. Biophys. Res. Commun.* 304, 437-444.
- Chau, B.N. et al. (2000) *Mol. Cell* 6, 31-40.
- Choi, J. et al. (2006) *Leuk. Res.* 30, 1019-1025.
- Paydas, S. et al. (2003) *Ann. Oncol.* 14, 1045-1050.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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