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

Aven Antibody

Catalog # ASC10134

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9NQS1
Other Accession	NP_065104, 9966841
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	38506
Conjugate	Unconjugated
Application Notes	Aven antibody can be used for detection of Aven by Western blot at 1 g/mL. Despite its predicted molecular weight, Aven often migrates at 55 kDa in SDS-PAGE. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	57099
Other Names	Aven Antibody: PDCD12, Cell death regulator Aven, apoptosis, caspase activation inhibitor
Target/Specificity	AVEN;
Reconstitution & Storage	Aven 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	Aven Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	AVEN
Function	Protects against apoptosis mediated by Apaf-1.
Cellular Location	Endomembrane system; Peripheral membrane protein. Note=Associated with intracellular membranes
Tissue Location	Highly expressed in testis, ovary, thymus, prostate, spleen, small intestine, colon, heart, skeletal muscle, liver, kidney and pancreas

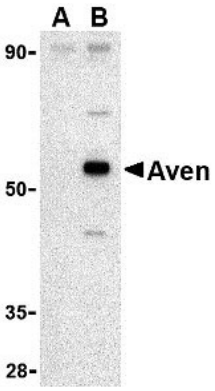
Background

Aven Antibody: Apoptosis plays a major role in normal organism development, tissue homeostasis, and removal of damaged cells. Disruption of this process has been implicated in a variety of diseases such as cancer. Aven is a recently discovered protein that blocks apoptosis induced by Apaf-1 and caspase-9. It is thought that Aven functions by binding to Bcl-xL, an antiapoptotic member of the Bcl-2 family, and to Apaf-1, possibly interfering with the ability of Apaf-1 to self-associate, suggesting that Aven impedes Apaf-1-mediated caspase activation. Higher levels of Aven mRNA are seen in patients with acute leukemia than in control patients, suggesting that Aven may be useful as a prognostic indicator in leukemia patients.

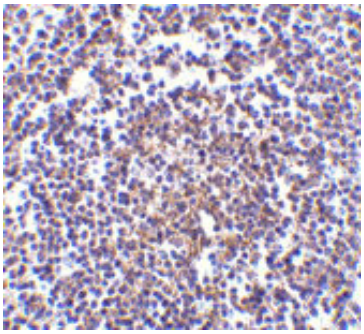
References

Lockshin RA, Osborne B, and Zakeri Z. Cell death in the third millennium. Cell Death Differ. 2000; 7:2-7.
Chau BN, Cheng EH-Y, Kerr DA, et al. Aven, a novel inhibitor of caspase activation. Binds Bcl-xL and Apaf-1. Mol. Cell 2000; 6:31-40.
Paydas S, Tanriverdi K, Yavuz S, et al. Survivin and aven: two distinct antiapoptotic signals in acute leukemias. Ann. Oncology 2003; 14:1045-50.

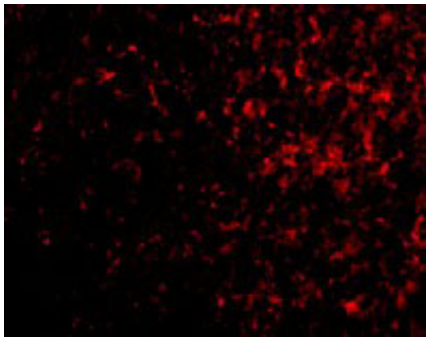
Images



Western blot analysis of Aven in Raji cell lysate with Aven antibody at 1 µg/mL in (A) the presence and (B) the absence of blocking peptide.



Immunohistochemistry of Aven in human spleen tissue with Aven antibody at 5 µg/mL.



Immunofluorescence of AVEN in Human Spleen cells with AVEN antibody at 20 µg/mL.