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TNFAIP1 Antibody

Catalog # ASC11954

Product Information

Application	WB, IHC, E
Primary Accession	Q13829
Other Accession	NP_066960, 10863937
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	36204
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TNFAIP1 antibody can be used for the detection of TNFAIP1 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry at 10 g/ml.

Additional Information

Gene ID	7126
Other Names	BTB/POZ domain-containing adapter for CUL3-mediated RhoA degradation protein 2, hBACURD2, BTB/POZ domain-containing protein TNFAIP1, Protein B12, Tumor necrosis factor, alpha-induced protein 1, endothelial, TNFAIP1, BACURD2, EDP1
Target/Specificity	TNFAIP1; TNFAIP1 antibody is human, mouse and rat reactive. TNFAIP1 antibody is predicted to not cross-react with other TNFAIP proteins.
Reconstitution & Storage	TNFAIP1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	TNFAIP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TNFAIP1
Synonyms	BACURD2, EDP1
Function	Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex involved in regulation of cytoskeleton structure. The BCR(TNFAIP1) E3 ubiquitin ligase complex mediates the ubiquitination of RHOA, leading to its degradation by the proteasome, thereby regulating the actin cytoskeleton and cell migration. Its interaction with RHOB may regulate apoptosis. May enhance the PCNA- dependent DNA polymerase delta activity.

Cellular Location Cytoplasm. Nucleus. Endosome. Note=Colocalizes with RHOB in endosomes

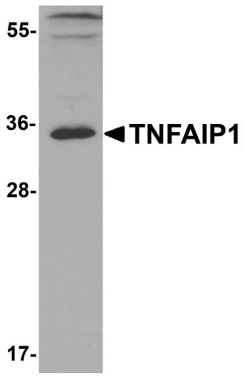
Background

TNFAIP1 is a BTB/POZ domain-containing protein that belongs to the KCTD10/BACURD family which mediates POZ-POZ interactions and chromatin modeling (1,2). The expression of TNFAIP1 is developmentally regulated in a tissue-specific manner and can be induced by the tumor necrosis factor alpha (TNF) in umbilical vein endothelial cells (3). TNFAIP1 may be involved in DNA repair, DNA synthesis, and cell apoptosis. TNFAIP1 is suggested to play a role in the process of cancer and in the innate immunity against the Hepatitis B virus (4,5).

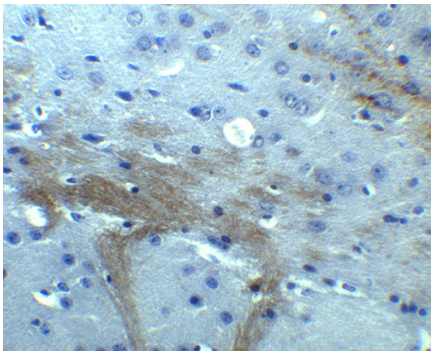
References

Liu M, Sun Z, Zhou A, et al. Functional characterization of the promoter region of human TNFAIP1 gene. Mol. Biol. Rep. 2010; 37:1699-705.
Hu X, Yan F, Wang F, et al. TNFAIP1 interacts with KCTD10 to promote the degradation of KCTD10 proteins and inhibit the transcriptional activities of NF-?B and AP-1. Mol. Biol. Rep. 2012; 39:9911-9.
Zhang CL, Wang C, Yan WJ, et al. Knockdown of TNFAIP1 inhibits growth and induces apoptosis in osteosarcoma cells through inhibition of the nuclear factor-?B pathway. Oncol. Rep. 2014; 32:1149-55.
Kim DM, Chung KS, Choi SJ, et al. RhoB induces apoptosis via direct interaction with TNFAIP1 in HeLa cells. Int. J. Cancer 2009; 125:2520-7.

Images



Western blot analysis of TNFAIP1 in mouse brain tissue lysate with TNFAIP1 antibody at 1 µg/ml.



Immunohistochemistry of TNFAIP1 in mouse brain tissue with TNFAIP1 antibody at 10 µg/ml.