

AATF Antibody

Catalog # ASC10174

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9NY61
Other Accession	NP_036270 , 7657013
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	63133
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	AATF antibody can be used for the detection of AATF by Western blot at 0.5 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 10 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	26574
Other Names	AATF Antibody: DED, BFR2, CHE1, CHE-1, DED, HSPC277, Protein AATF, Apoptosis-antagonizing transcription factor, apoptosis antagonizing transcription factor
Target/Specificity	AATF;
Reconstitution & Storage	AATF 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	AATF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	AATF (HGNC:19235)
Synonyms	CHE1, DED
Function	Part of the small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre- rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre- ribosomal RNA by the RNA exosome

(PubMed:[34516797](#)). May function as a general inhibitor of the histone deacetylase HDAC1. Binding to the pocket region of RB1 may displace HDAC1 from RB1/E2F complexes, leading to activation of E2F target genes and cell cycle progression. Conversely, displacement of HDAC1 from SP1 bound to the CDKN1A promoter leads to increased expression of this CDK inhibitor and blocks cell cycle progression. Also antagonizes PAWR mediated induction of aberrant amyloid peptide production in Alzheimer disease (presenile and senile dementia), although the molecular basis for this phenomenon has not been described to date.

Cellular Location

Nucleus, nucleolus

Tissue Location

Ubiquitously expressed. Expressed at high levels in brain, heart, kidney, placenta and thymus

Background

AATF Antibody: AATF (apoptosis antagonizing transcription factor) was initially discovered as an interaction partner of ZIP kinase (ZIPK), a member of death-associated protein (DAP) kinase family of pro-apoptotic serine/threonine kinases. AATF is a phosphoprotein containing an acidic region and a putative leucine zipper domain and nuclear localization signal, features which are typical of transcription factors. AATF inhibits the ZIPK-mediated pro-apoptotic pathway and may activate other anti-apoptotic pathways. Recently, it has also been shown to protect neural cells against oxidative damage induced by amyloid b-peptide and to inhibit aberrant production of the beta-peptide by interacting with Par-4 (prostate apoptosis response-4), another pro-apoptotic leucine zipper protein that is associated with neuronal degeneration in Alzheimer's disease (AD), suggesting that AATF may have potential therapeutic applications in both familial and sporadic forms of AD.

References

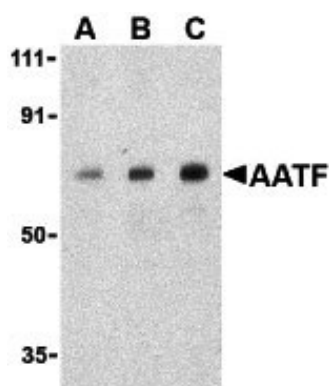
AATF antibody can be stored at 4° C, stable for one year. Page G, Lodige I, Kogel D et al. AATF, a novel transcription factor that interacts with Dlk/ZIP kinase and interferes with apoptosis. FEBS Lett. 1999; 462:187-191.

Kawai T, Matsumoto M, Takeda K, et al. ZIP kinase, a novel serine/threonine kinase which mediates apoptosis. Mol. Cell Biol. 1998; 18:1642-51.

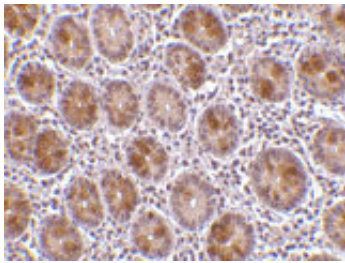
Lindfors K, Halttunen T, Huotari P, et al. Identification of novel transcription factor-like gene from human intestinal cells. Biochem. Biophys. Res. Commun. 2000; 276:660-6.

Xie J and Guo Q. AATF protects neural cells against oxidative damage induced by amyloid b-peptide. Neurobiol. of Dis. 2004; 16:150-7.

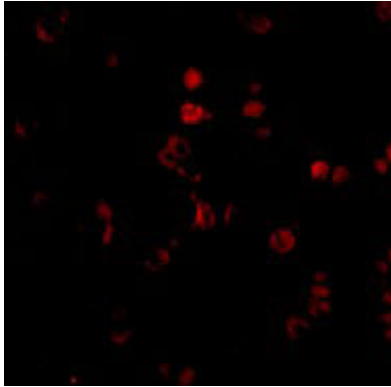
Images



Immunohistochemistry of AATF in human small intestine



tissue with AATF antibody at 10 µg/mL.



Immunofluorescence of AATF in Human Small Intestine cells with AATF antibody at 20 µg/mL.

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