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AATF Antibody
Catalog # ASC10174

Specification

AATF Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q9NY61
Other Accession	NP_036270, 7657013
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**AATF antibody can be used for the detection of AATF by Western blot at 0.5 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.**

AATF Antibody - 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℃ 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
AATF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

AATF Antibody - 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

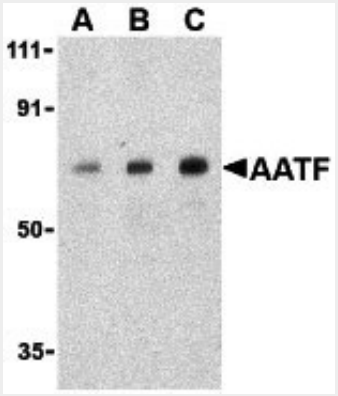
Tissue Location
Ubiquitously expressed. Expressed at high levels in brain, heart, kidney, placenta and thymus

AATF Antibody - Protocols

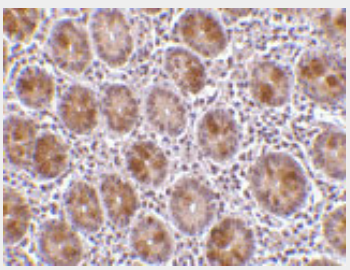
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

AATF Antibody - Images



Western blot analysis of AATF in human small intestine cell lysate with AATF antibody at (A) 0.5, (B) 1 and (C) 2 µg/mL.



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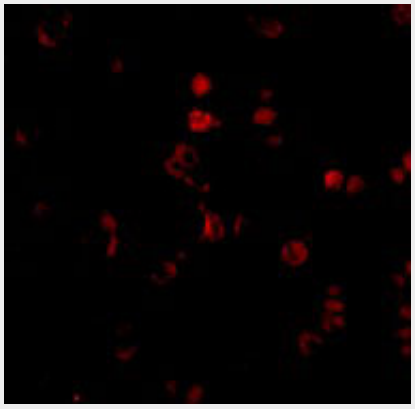
Immunohistochemistry of AATF in human small intestine tissue with AATF antibody at 10 µg/mL.



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

AATF Antibody - 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.

AATF Antibody - 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.