abcam

ab228684

Anti-AIP antibody

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 20% Glycerol (glycerin, glycerine), 1.21% Tris, 0.75% Glycine
Form	Liquid
Clonality	Polyclonal
Immunogen	Recombinant Fragment Protein within Human AIP. The exact immunogen used to generate this antibody is proprietary information. Database link O00170 ↗
Purification technique	Affinity purification Immunogen
Concentration	1.01 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/500 - 1/3000
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Rat, Cow, Rhesus monkey
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/100 - 1/1000
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Rat, Cow, Rhesus monkey
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/1000

| Notes | - |

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Rat, Cow, Rhesus monkey
Dilution info	-
Notes	-

Target data

[See full target information AIP](#) ↗

| Function | May play a positive role in AHR-mediated (aromatic hydrocarbon receptor) signaling, possibly by influencing its receptivity for ligand and/or its nuclear targeting. Cellular negative regulator of the hepatitis B virus (HBV) X protein. |

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	AIP also known as aryl hydrocarbon receptor-interacting protein is a molecular chaperone with a mass of approximately 37 kDa. It mainly resides in the cytoplasm of cells and interacts with various proteins. Expression of the AIP protein occurs in many tissues including liver lung and brain. This protein plays a significant role in maintaining the stability and proper functioning of its interacting partners.
Biological function summary	AIP acts as a modulator of protein-protein interactions impacting several signaling pathways. It is a part of the larger protein complex involving heat shock proteins which helps prevent the degradation of its client proteins. AIP is essential for the activity and stability of receptors like the aryl hydrocarbon receptor (AHR) helping these receptors remain in a functional state until they get activated.
Pathways	AIP incorporates itself into the AHR signaling pathway which affects the regulation of xenobiotic metabolism. The protein is also involved in the regulation of the glucocorticoid receptor pathway working closely with proteins like Hsp90. Through these interactions AIP influences the ability of cells to respond to environmental toxins and physiological stress thereby playing a role in cellular homeostasis.
Associated diseases and disorders	AIP has a connection with familial isolated pituitary adenomas (FIPA) and is also implicated in some forms of cancer. AIP mutations can lead to alterations in the function of the AHR receptor which is linked to these conditions. A notable interaction partner of AIP in these contexts is the pituitary tumor transforming gene (PTTG) which highlights its role in tumorigenesis and the regulation of cell proliferation.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.
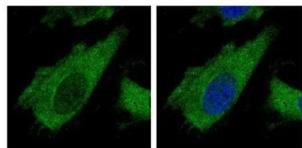
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

3 product images

## Immunocytochemistry/ Immunofluorescence - Anti-AIP antibody (ab228684)

AIP Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-AIP antibody

4% paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for AIP (green) using ab228684 at 1/500 dilution in ICC/IF.
Nuclear counterstain: Hoechst 33342 (blue).
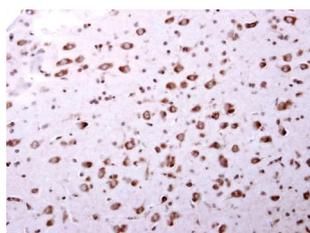
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AIP antibody (ab228684)

Paraffin-embedded mouse middle brain tissue stained for AIP using ab228684 at 1/500 dilution in immunohistochemical analysis.
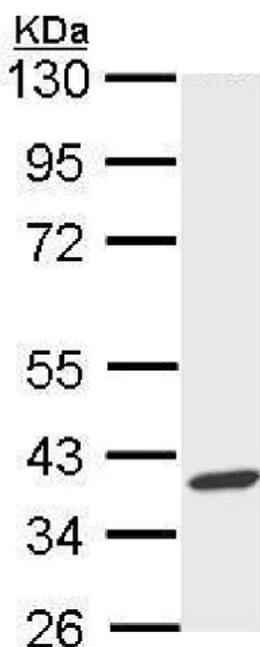
Western blot - Anti-AIP antibody (ab228684)

10% SDS-PAGE gel.
All lanes:
Western blot - Anti-AIP antibody (ab228684) at 1/1000 dilution

All lanes:
MOLT-4 (human lymphoblastic leukemia cell line) whole cell lysate at 30 µg

Predicted band size: 37 kDa