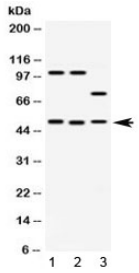
AZIN2 Antibody / Antizyme inhibitor 2 (R32486)

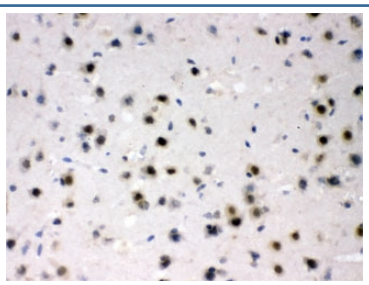
Catalog No.	Formulation	Size
R32486	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

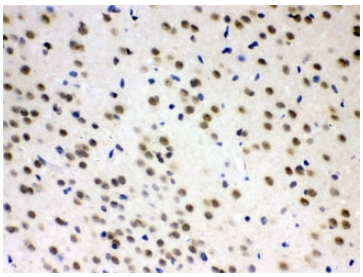
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q96A70
Localization	Predominantly nuclear, possible cytoplasmic staining
Applications	Western Blot : 0.5-1ug/ml IHC (FFPE) : 1-2ug/ml
Limitations	This AZIN2 antibody is available for research use only.



Western blot testing of 1) rat brain, 2) mouse brain and 3) human HeLa lysate with AZIN2 antibody at 0.5ug/ml. Predicted molecular weight: 22-52 kDa (multiple isoforms).



IHC testing of FFPE mouse brain with AZIN2 antibody at 1ug/ml. HIER: steam sections in pH6 citrate buffer.



IHC testing of FFPE rat brain with AZIN2 antibody at 1ug/ml. HIER: steam sections in pH6 citrate buffer.

Description

Antizyme inhibitor 2 (AzI2), also known as arginine decarboxylase (ADC), is an enzyme that in humans is encoded by the AZIN2 gene. The protein encoded by this gene belongs to the antizyme inhibitor family, which plays a role in cell growth and proliferation by maintaining polyamine homeostasis within the cell. Antizyme inhibitors are homologs of ornithine decarboxylase (ODC, the key enzyme in polyamine biosynthesis) that have lost the ability to decarboxylase ornithine; however, retain the ability to bind to antizymes. Antizymes negatively regulate intracellular polyamine levels by binding to ODC and targeting it for degradation, as well as by inhibiting polyamine uptake. Antizyme inhibitors function as positive regulators of polyamine levels by sequestering antizymes and neutralizing their effect. This gene encodes antizyme inhibitor 2, the second member of this gene family. Like AZIN1, AZIN2 interacts with all three antizymes and stimulates ODC activity and polyamine uptake. However, unlike AZIN1, which is ubiquitously expressed and localized in the nucleus and cytoplasm, AZIN2 is predominantly expressed in the brain and testis and localized in the endoplasmic reticulum-golgi intermediate compartment. Recent studies indicate that AZIN2 is also expressed in specific cell types in ovaries, adrenal glands and pancreas, and in mast cells. The exact function of this gene is not known, however, available data suggest its role in cell growth, spermiogenesis, vesicular trafficking and secretion.

Application Notes

Differences in protocols and secondary/substrate sensitivity may require the AZIN2 antibody to be titrated for optimal performance.

Immunogen

Amino acids C111-Q301 from the human protein were used as the immunogen for the AZIN2 antibody.

Storage

After reconstitution, the AZIN2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.