

ADC antibody - middle region

Rabbit Polyclonal Antibody

Catalog # AI13418

Product Information

Application	WB
Primary Accession	Q96A70
Other Accession	NM_052998 , NP_443724
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49980

Additional Information

Gene ID	113451
Alias Symbol	AZI2, KIAA1945, ODC-p, ODC1L
Other Names	Antizyme inhibitor 2, AzI2, Arginine decarboxylase, ADC, ARGDC, Ornithine decarboxylase-like protein, ODC-like protein, ornithine decarboxylase paralog, ODC-p, AZIN2, ADC, KIAA1945, ODCP
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-ADC antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	ADC antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	AZIN2
Synonyms	ADC, KIAA1945, ODCP
Function	Antizyme inhibitor (AZI) protein that positively regulates ornithine decarboxylase (ODC) activity and polyamine uptake. AZI is an enzymatically inactive ODC homolog that counteracts the negative effect of ODC antizymes (AZs) OAZ1, OAZ2 and OAZ3 on ODC activity by competing with ODC for antizyme-binding (PubMed: 17900240). Inhibits antizyme- dependent ODC degradation and releases ODC monomers from their inactive complex with antizymes, leading to formation of the catalytically active ODC homodimer

and restoring polyamine production (PubMed:[17900240](#)). Participates in the morphological integrity of the trans-Golgi network (TGN) and functions as a regulator of intracellular secretory vesicle trafficking (PubMed:[20188728](#)).

Cellular Location

Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Membrane. Cytoplasmic vesicle Endoplasmic reticulum-Golgi intermediate compartment Golgi apparatus, cis-Golgi network. Golgi apparatus, trans-Golgi network. Cytoplasmic granule. Cell projection, axon. Cell projection, dendrite. Perikaryon. Note=Colocalizes with KDEL receptors in ER-Golgi intermediate compartment (ERGIC). Translocates from the ERGIC structure to the cytoplasm in an antizyme-dependent manner Localizes with vesicle-associated membrane protein VAMP8 in the vicinity of the plasma membrane within serotonin-containing secretory granules (By similarity). Detected as vesicle-like pattern in neurite outgrowths. Localizes to the vesicular compartments of the secretory pathway, predominantly in the trans-Golgi network (TGN). Localizes with vesicle-associated membrane protein VAMP8 in the vicinity of the plasma membrane within serotonin-containing secretory granules.

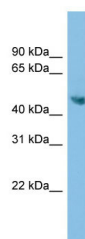
Tissue Location

Expressed in the neocortex, thalamus, hippocampus, cerebellum, medulla oblongata, gray and white matter. Expressed in neurons, oligodendrocytes, basket, Purkinje and pyramidal cells Expressed in spermatocytes and Leydig cells of the testis. Expressed in luteal theca cells lining corpus luteum cysts and in hilus cells of the ovary. Expressed in primary and neoplastic mast cells (MC) (at protein level). Highly expressed in brain. Also expressed in testis

References

Pitkaenen L.T.,et al.Biochem. Biophys. Res. Commun. 287:1051-1057(2001).
Zhu M.-Y.,et al.Biochim. Biophys. Acta 1670:156-164(2004).
Nagase T.,et al.DNA Res. 8:319-327(2001).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Gregory S.G.,et al.Nature 441:315-321(2006).

Images



WB Suggested Anti-ADC Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:12500
Positive Control: COLO205 cell lysate

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.