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DDC Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5536a

Product Information

Application	WB, IF, IHC-P, FC, E
Primary Accession	P20711
Other Accession	NP_000781.1
Reactivity	Human, Mouse
Predicted	Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21702
Calculated MW	53926
Antigen Region	32-61

Additional Information

Gene ID	1644
Other Names	Aromatic-L-amino-acid decarboxylase, AADC, DOPA decarboxylase, DDC, DDC, AADC
Target/Specificity	This DDC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 32-61 amino acids from the N-terminal region of human DDC.
Dilution	WB~~1:1000 IF~~1:10~50 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DDC Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DDC {ECO:0000303|PubMed:15532536, ECO:0000312|HGNC:HGNC:2719}
Function	Catalyzes the decarboxylation of L-3,4-dihydroxyphenylalanine (DOPA) to

dopamine and L-5-hydroxytryptophan to serotonin.

Tissue Location [Isoform 2]: High expression in kidney.

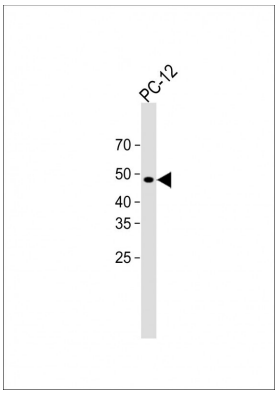
Background

This protein catalyzes the decarboxylation of L-3,4-dihydroxyphenylalanine (DOPA) to dopamine, L-5-hydroxytryptophan to serotonin and L-tryptophan to tryptamine. Defects in this gene are the cause of aromatic L-amino-acid decarboxylase deficiency (AADCD). AADCD deficiency is an inborn error in neurotransmitter metabolism that leads to combined serotonin and catecholamine deficiency.

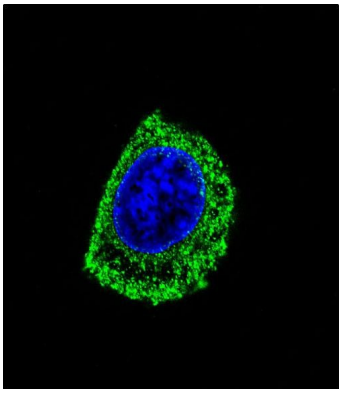
References

Kokkinou, I., et al. J. Neuroimmunol. 216 (1-2), 51-58 (2009) : Meda, S.A., et al. Neuroimage (2009) Ishikawa, S., et al. J. Biol. Chem. 284(42):28832-28844(2009) Trevino, L.R., et al. Nat. Genet. 41(9):1001-1005(2009)

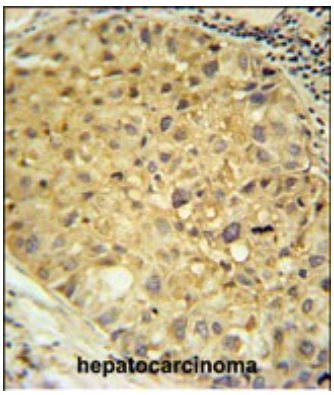
Images



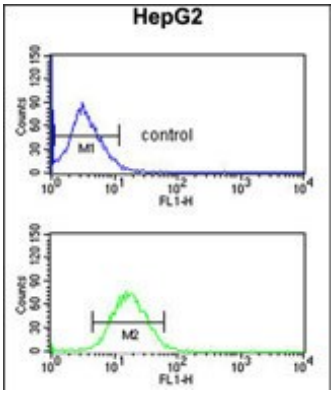
All lanes: Anti-DDC Antibody (N-term) at 1:2000 dilution + PC-12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 48 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



Confocal immunofluorescent analysis of DDC Antibody (N-term)(Cat#AP5536a) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).



DDC Antibody (N-term) (Cat. #AP5536a) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DDC Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



DDC Antibody (N-term) (Cat. #AP5536a) flow cytometric analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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