

DOPA Decarboxylase Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1032

Specification

DOPA Decarboxylase Antibody - Product Information

Application	WB
Primary Accession	P27718
Reactivity	Rat
Predicted	Bovine
Host	Rabbit
Clonality	polyclonal
Calculated MW	55 KDa

DOPA Decarboxylase Antibody - Additional Information

Gene ID	280762
Gene Name	DDC

Other Names

Aromatic-L-amino-acid decarboxylase, AADC, DOPA decarboxylase, DDC, DDC

Target/Specificity

SDS denatured, recombinant bovine aromatic DOPA decarboxylase expressed in E. coli and purified from inclusion bodies.

Dilution

WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification using an AminoLink® Plus column matrix to which purified, recombinant bovine DDC was coupled.

Antibody Specificity

Specific for the ~55k DDC protein.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DOPA Decarboxylase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

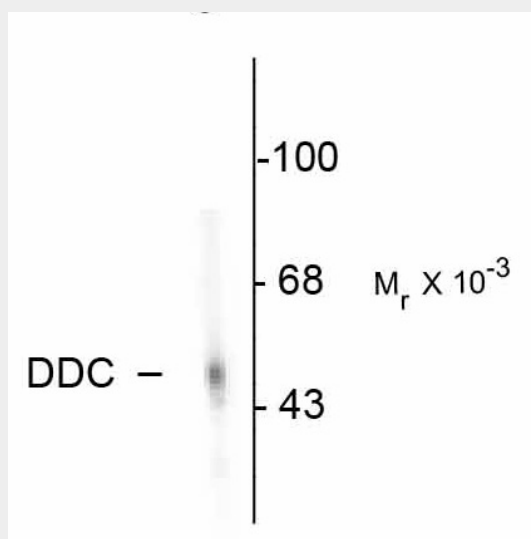
Blue Ice

DOPA Decarboxylase 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 Cytometry](#)
- [Cell Culture](#)

DOPA Decarboxylase Antibody - Images



Western blot of rat adrenal medulla showing specific immunolabeling of the ~55k DDC protein.

DOPA Decarboxylase Antibody - Background

DOPA decarboxylase (aromatic L-amino acid decarboxylase, AADC; DDC) catalyzes the second reaction in the biosynthesis of catecholamines and serotonin (Waymire and Haycock, 2002; Berry et al., 1996; Haycock et al., 2003). It is also involved in the biosynthesis of trace amines. DDC antibodies can therefore be used as markers for dopaminergic, noradrenergic and serotonergic neurons in a variety of applications including depression, schizophrenia, Parkinson's disease and drug abuse (Kish et al., 2001; Zhu et al., 2000; Zhu et al., 1999).

DOPA Decarboxylase Antibody - References

Berry MD, Juorio AV, Li XM, Boulton AA (1996) Aromatic L-amino acid decarboxylase: a neglected and misunderstood enzyme. *Neurochem Res* 21:1075-1087.

Haycock JW, Becker L, Ang L, Furukawa Y, Hornykiewicz O, Kish SJ (2003) Marked disparity between age-related changes in dopamine and other presynaptic dopaminergic markers in human striatum. *J Neurochem* 87:574-585.

Kish SJ, Kalasinsky KS, Derkach P, Schmunk GA, Guttman M, Ang L, Adams V, Furukawa Y, Haycock JW (2001) Striatal dopaminergic and serotonergic markers in human heroin users. *Neuropsychopharmacology* 24:561-567.

Waymire JC, Haycock JW (2002) Lack of regulation of aromatic L-amino acid decarboxylase in intact bovine chromaffin cells. *J Neurochem* 81:589-593.

Zhu MY, Klimek V, Haycock JW, Ordway GA (2000) Quantitation of tyrosine hydroxylase protein in the locus coeruleus from postmortem human brain. *J Neurosci Meth* 99:37-44.

Zhu MY, Klimek V, Dilley GE, Haycock JW, Stockmeier C, Overholser JC, Meltzer HY, Ordway GA (1999) Elevated levels of tyrosine hydroxylase in the locus coeruleus in major depression. Biol Psychiatry 46:1275-1286.