

DOPA Decarboxylase Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1067

Specification

DOPA Decarboxylase Antibody - Product Information

Application	WB
Primary Accession	P20711
Reactivity	Bovine, Human, Pig, Rabbit
Host	Rabbit
Clonality	polyclonal
Calculated MW	55 KDa

DOPA Decarboxylase Antibody - Additional Information

Gene ID	1644
Gene Name	DDC
Other Names	Aromatic-L-amino-acid decarboxylase, AADC, DOPA decarboxylase, DDC, DDC, AADC

Target/Specificity

Synthetic peptide corresponding to amino acid residues from the N-terminal region conjugated to KLH.

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

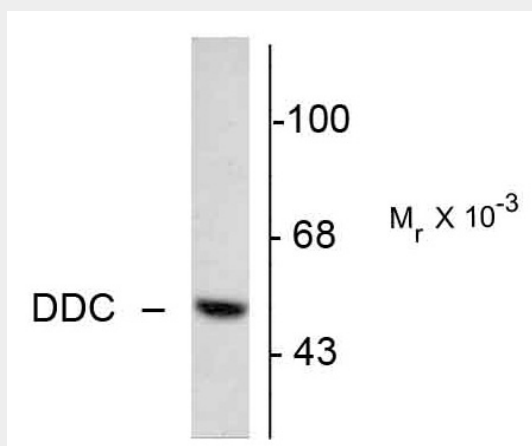
Blue Ice

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 5 µg of bovine adrenal medulla lysate showing specific immunolabeling of the ~55k DOPA decarboxylase 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.