10320 Camino Santa Fe, Suite G
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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.

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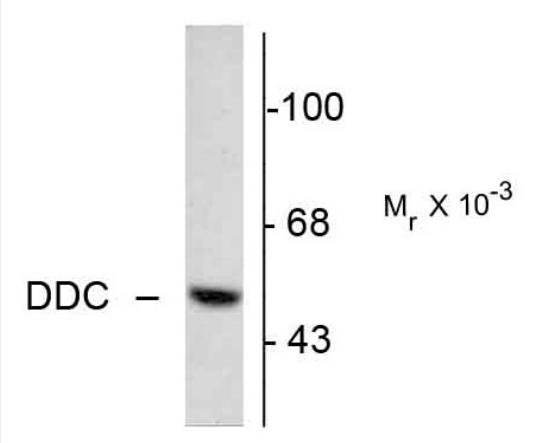
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.