Qty: 100 µL

Rabbit anti-DOPA Decarboxylase

Catalog No. 483200

Lot No.

Rabbit Anti-DOPA Decarboxylase

FORM
This affinity-purified rabbit polyclonal antibody is supplied as a 100 µL aliquot in 10 mM HEPES (pH 7.5), 150 mM NaCl containing BSA and 50% glycerol.

PAD: ZMD.641

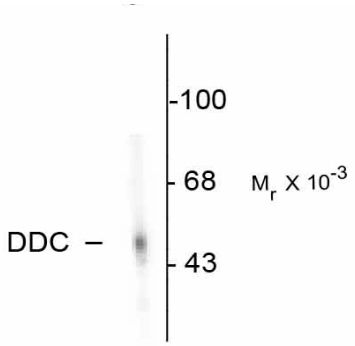
IMMUNOGEN
SDS denatured, recombinant bovine aromatic DOPA decarboxylase (DDC) expressed in E. coli and purified from inclusion bodies.

SPECIFICITY
Specific for the ~55 kDa DDC protein.

REACTIVITY
The antibody has been directly tested for reactivity in Western blots in rat tissues.

Sample	Western Blotting
Rat	+++

(Excellent +++, Good ++, Poor +, No reactivity 0, Not applicable N/A, Not determined ND)



Western blot of rat adrenal medulla. As shown in the autoradiograph, the antibody is specific for the ~55 kDa DDC protein.

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting: 1:1000

(cont'd)

STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long-term storage. Avoid repeated freezing and thawing.

BACKGROUND
DOPA decarboxylase (aromatic L-amino acid decarboxylase, AADC; DDC) catalyzes the second reaction in the biosynthesis of catecholamines and serotonin.[1-3] 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.[4-6]

REFERENCES

1. Waymire JC, Haycock JW, J Neurochem 81:589-593, 2002.
2. Berry MD, et al., Neurochem Res 21:1075-1087, 1996.
3. Haycock JW, et al., J Neurochem 87:574-585, 2003.
4. Kish SJ, et al., Neuropsychopharmacology 24:561-567, 2001.
5. Zhu MY, et al., J Neurosci Meth 99:37-44, 2000.
6. Zhu MY, et al., Biol Psychiatry 46:1275-1286, 1999.

RELATED PRODUCTS

Product	***Conjugate***	***Cat. No.***
Protein A	Sepharose 4B	10-1041
rec-Protein G	Sepharose 4B	10-1241
ZyMAX™ Goat anti-rabbit IgG	Unconjugated	81-6100
ZyMAX™ Goat anti-mouse IgG	Unconjugated	81-6500

Secondary antibody conjugates.

Conjugate	***Goat anti-rabbit IgG (H+L)***	***Goat anti-mouse IgG (H+L)***	***Ex/Em****	***Fluorescence similar to--***
Alexa Fluor® 488	A11008	A11001	495/519	FITC
Alexa Fluor® 555	A21428	A21422	555/565	Cy3
Alexa Fluor® 594	A11012	A11005	590/617	Texas Red
Alexa Fluor® 647	A21244	A21235	650/668	Cy5
HRP	81-6120	81-6520	NA**	NA
AP	81-6122	81-6522	NA	NA
Biotin	B2770	B2763	NA	NA

*Excitation/emission (nm); **Not applicable

For additional secondary antibody conjugates, visit www.invitrogen.com/antibodies

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