



## Rabbit Anti-DOPA Decarboxylase antibody

SL0180R

<b>Product Name:</b>	DOPA Decarboxylase
<b>Chinese Name:</b>	多巴胺脱羧酶抗体
<b>Alias:</b>	AADC; DDC; Aromatic L Amino Acid Decarboxylase; DDC protein; DOPA decarboxylase; aromatic-L-amino-acid decarboxylase isoform 1; DDC_HUMAN.
<b>文献引用</b> <b>PubMed</b> :	<b>Specific References(1)</b>  SL0180R has been referenced in 1 publications. [IF=1.29]Hiramoto, Keiichi, Yurika Yamate, and Shosuke Kawanishi. "Detection of Dopa-positive cells in mouse ovaries in response to ocular exposure to ultraviolet B rays." Photodermatology, Photoimmunology & Photomedicine (2014).IHC-F;Mouse. <a href="https://pubmed.ncbi.nlm.nih.gov/25345490/">PubMed:25345490</a>
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	53kDa
<b>Cellular localization:</b>	cytoplasmicExtracellular matrix
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human DDC:201-300/480
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**PubMed:**[PubMed](#)

DOPA decarboxylase is an enzyme implicated in 2 metabolic pathways, synthesizing 2 important neurotransmitters: dopamine and serotonin which both play key roles in many clinical disorders, including Parkinson's disease. Following the hydroxylation of tyrosine to form L dihydroxyphenylalanine (LDOPA), catalyzed by tyrosine hydroxylase, DDC decarboxylates LDOPA to form dopamine. This neurotransmitter is found in different areas of the brain and is particularly abundant in basal ganglia. Dopamine is also produced by DDC in the sympathetic nervous system and is the precursor of the catecholaminergic hormones, noradrenaline and adrenaline in the adrenal medulla. In the nervous system, tryptophan hydroxylase produces 5 OH tryptophan, which is decarboxylated by DDC, giving rise to serotonin. DDC is a homodimeric, pyridoxal phosphate dependent enzyme.

**Function:**

Catalyzes the decarboxylation of L-3,4-dihydroxyphenylalanine (DOPA) to dopamine, L-5-hydroxytryptophan to serotonin and L-tryptophan to tryptamine.

**Subunit:**

Homodimer.

**DISEASE:**

Defects in DDC are the cause of aromatic L-amino-acid decarboxylase deficiency (AADCD) [MIM:608643]. AADCD deficiency is an inborn error in neurotransmitter metabolism that leads to combined serotonin and catecholamine deficiency. It causes developmental and psychomotor delay, poor feeding, lethargy, ptosis, intermittent hypothermia, gastrointestinal disturbances. The onset is early in infancy and inheritance is autosomal recessive.

**Similarity:**

Belongs to the group II decarboxylase family.

**SWISS:**

P20711

**Gene ID:**

1644

**Database links:**

[Entrez Gene: 1644](#)Human

[Entrez Gene: 13195](#)Mouse

[Entrez Gene: 24311](#)Rat

[Omin: 107930](#)Human

[SwissProt: P20711](#)Human

**Product Detail:**

[SwissProt: O88533](#)Mouse

[SwissProt: P14173](#)Rat

[Unigene: 359698](#)Human

[Unigene: 12906](#)Mouse

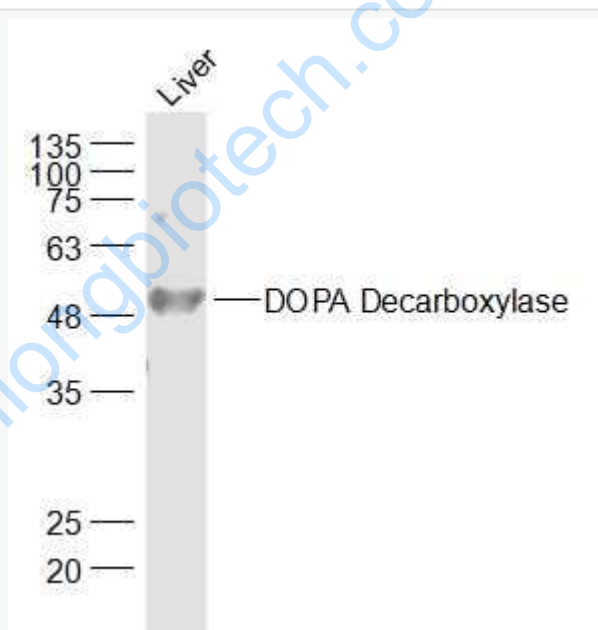
[Unigene: 11064](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

该抗体主要用于:神经细胞退行性改变-老年痴呆的研究

**Picture:**



Sample:

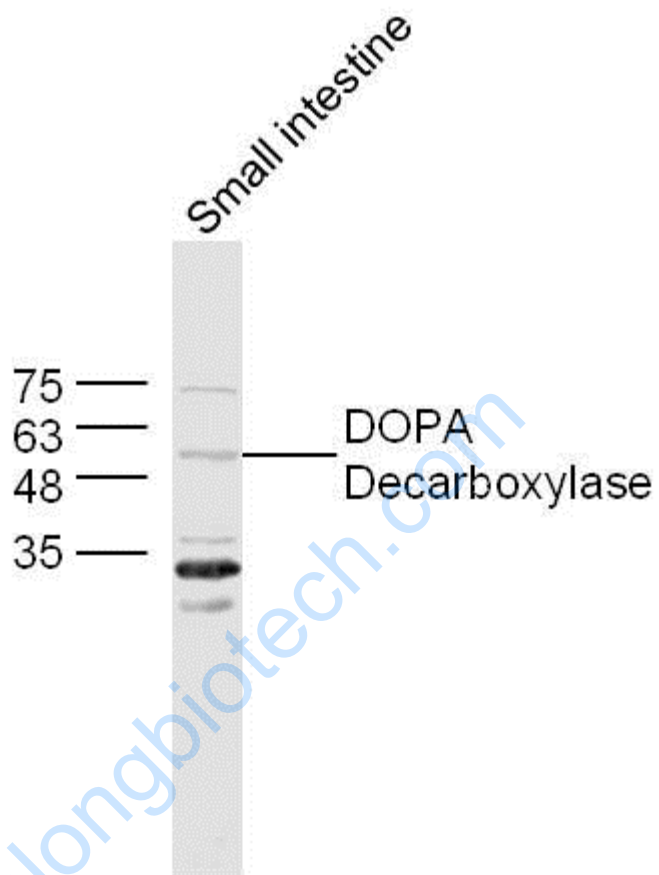
Liver (Mouse) Lysate at 40 ug

Primary: Anti-DOPA Decarboxylase (SL0180R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 53 kD

Observed band size: 53 kD



Sample:

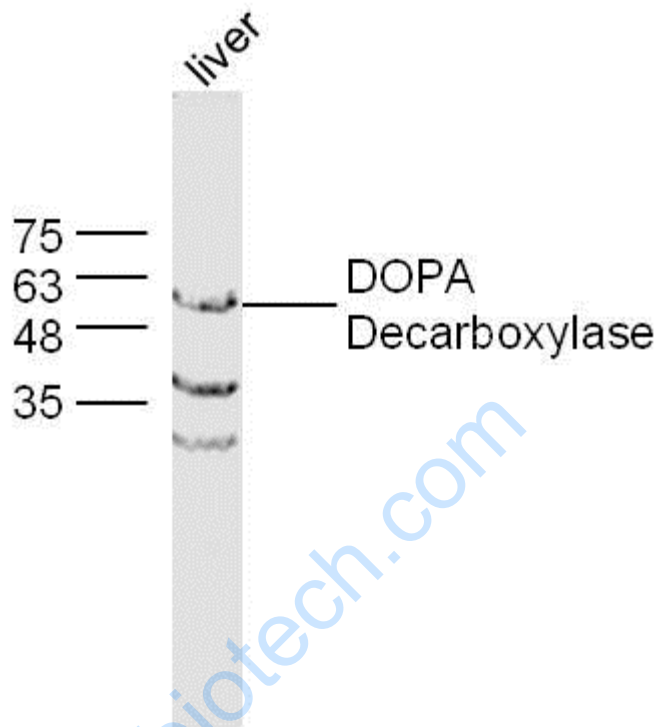
Small intestine (Mouse) Lysate at 40 ug

Primary: Anti-DOPA Decarboxylase (SL0180R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 53 kD

Observed band size: 53 kD



Sample:

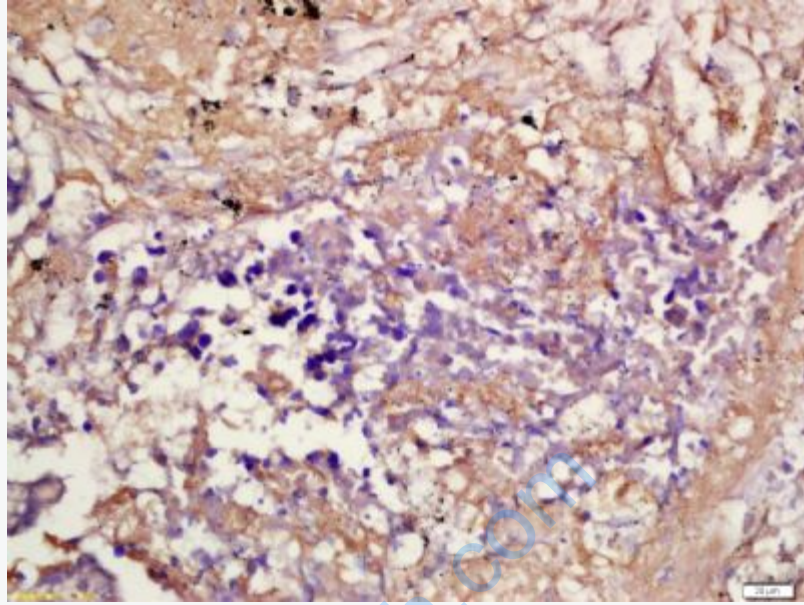
Liver (Mouse) Lysate at 40 ug

Primary: Anti-DOPA Decarboxylase (Bs- 0180R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 53 kD

Observed band size: 53 kD

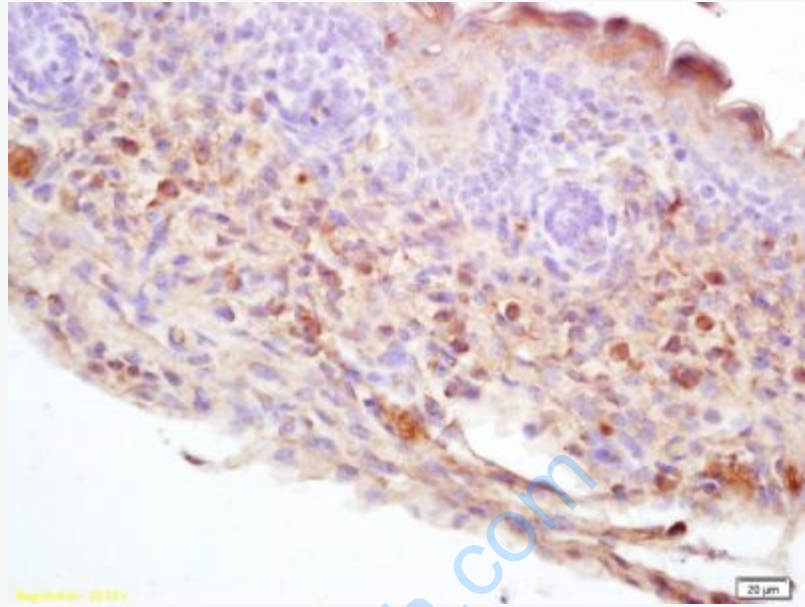


Tissue/cell: human lung cancer tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-DOPA Decarboxylase Polyclonal Antibody,

Unconjugated(SL0180R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

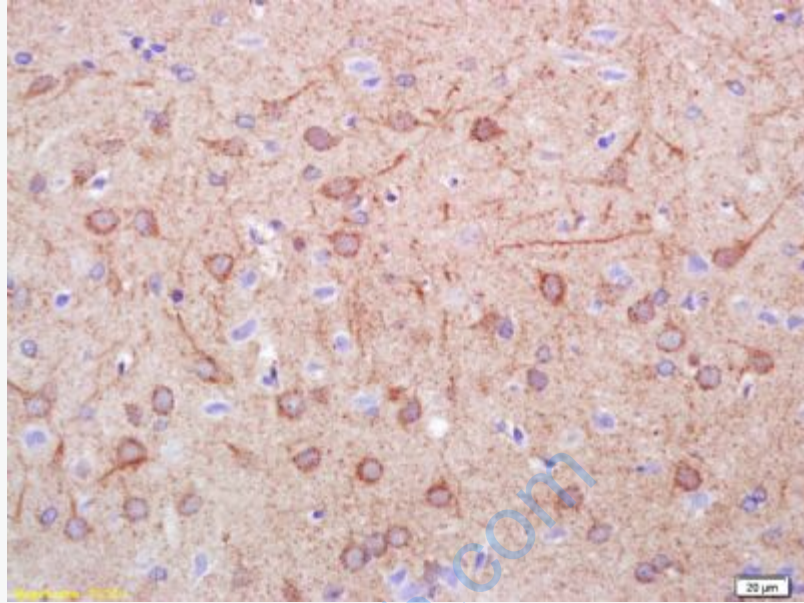


Tissue/cell: mouse embryo tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-DDC/DOPA Decarboxylase Polyclonal Antibody,

Unconjugated(SL0180R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-DDC/DOPA Decarboxylase Polyclonal Antibody, Unconjugated(SL0180R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining