For Research Use Only

DOPA decarboxylase Polyclonal antibody

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Antibodies | ELISA kits | Proteins
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Catalog Number:10166-1-AP 9 Publications

Basic Information

Catalog Number:
10166-1-AP

Size:
450 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0219

GenBank Accession Number:
BC008366

GeneID (NCBI):
1644

UNIPROT ID:
P20711

Full Name:
dopa decarboxylase (aromatic L-amino acid decarboxylase)

Calculated MW:
54 kDa

Observed MW:
48-50 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:3000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:500-1:2000
IF 1:200-1:800

Applications

Tested Applications:
IF/ICC, IHC, IP, WB, ELISA

Cited Applications:
IF, IHC, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : SH-SY5Y cells, mouse kidney tissue, mouse brain tissue, rat kidney tissue, PC-12 cells

IP : mouse brain tissue,

IHC : mouse kidney tissue, human liver cancer tissue, rat kidney tissue, rat small intestine tissue

IF : SH-SY5Y cells,

Background Information

Aromatic-L-amino-acid decarboxylase belongs to the pyridoxal-dependent aminotransferase superfamily.DDC catalyzes the decarboxylation of L-3,4-dihydroxyphenylalanine (DOPA) to dopamine, L-5-hydroxytryptophan to serotonin and L-tryptophan to tryptamine.DDC is the cause of aromatic L-amino-acid decarboxylase deficiency (AADCD).Researches showed that Ddc is only one of the enzymes in the biosynthetic pathways for bioamines and catecholamines.

Notable Publications

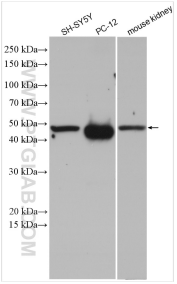
Author	Pubmed ID	Journal	Application
Mette Q Ludwig	33767443	Nat Metab	IHC
Ming Ming	19558709	J Transl Med	WB
Hao Qian	32581380	Nature	IF

Storage

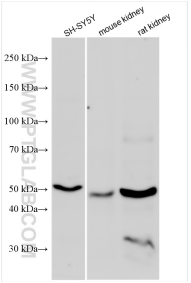
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

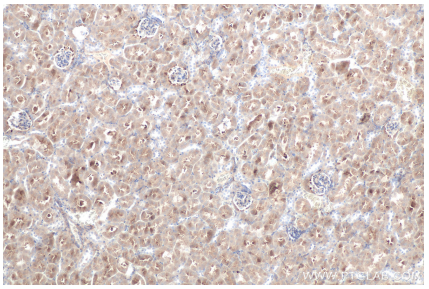
Selected Validation Data



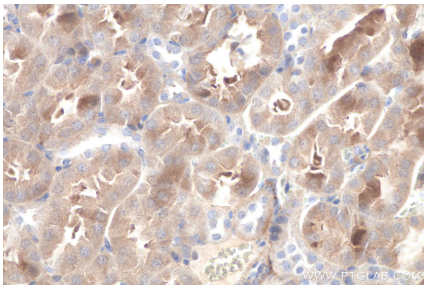
Various lysates were subjected to SDS PAGE followed by western blot with 10166-1-AP (DOPA decarboxylase antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



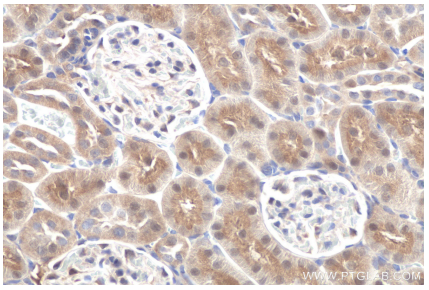
Various lysates were subjected to SDS PAGE followed by western blot with 10166-1-AP (DOPA decarboxylase antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



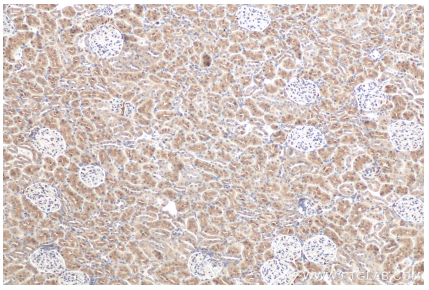
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 10166-1-AP (DOPA decarboxylase antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



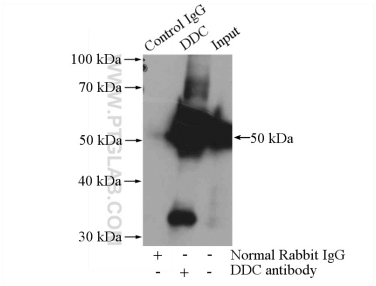
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 10166-1-AP (DOPA decarboxylase antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



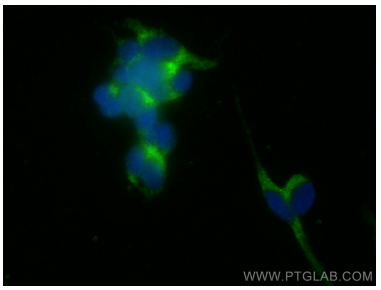
Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using 10166-1-AP (DOPA decarboxylase antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using 10166-1-AP (DOPA decarboxylase antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-DOPA decarboxylase (IP:10166-1-AP, 4ug; Detection:10166-1-AP 1:800) with mouse brain tissue lysate 4000ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using DOPA decarboxylase antibody (10166-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).