For Research Use Only

HDDC3 Polyclonal antibody

Catalog Number:21091-1-AP 2 Publications

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Basic Information

Catalog Number:
21091-1-AP

Size:
150ul , Concentration: 350 ug/ml by Nanodrop and 260 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG15342

GenBank Accession Number:
BC033794

GeneID (NCBI):
374659

UNIPROT ID:
Q8N4P3

Full Name:
HD domain containing 3

Calculated MW:
179 aa, 20 kDa

Observed MW:
22-25 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:4000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500

Applications

Tested Applications:
WB, IP, IHC, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human, 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 : A431 cells, HeLa cells, human heart tissue, mouse heart tissue, mouse kidney tissue, mouse lung tissue, mouse pancreas tissue, mouse testis tissue, A549 cells, rat heart tissue

IP : HeLa cells,

IHC : human prostate cancer tissue, human brain tissue, human breast cancer tissue, human kidney tissue

Background Information

MESH1, encodes by HDDC3 in human and Q9VAM9 in Drosophila melanogaster, was identified as functional SpoT orthologs in metazoan (PMID: 20818390). MESH1 is a cytosolic NADPH phosphatase that is induced under stress conditions, leading to the NADPH depletion and ferroptosis-a novel form of iron-dependent regulated cell death characterized by lipid peroxidation. Accordingly, MESH1 removal preserves the NADPH level in stressed cells and promotes their ferroptotic survival(PMID: 32462112, PMID: 34294679).

Notable Publications

Author	Pubmed ID	Journal	Application
Tianai Sun	35273140	Cell Death Dis	WB
Fangxu Sun	39595574	Biomolecules	WB

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

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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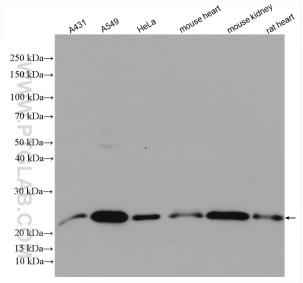
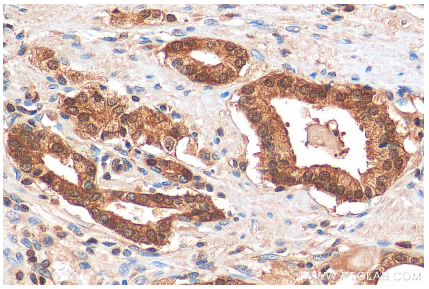
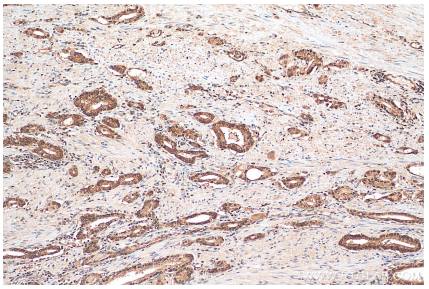
Selected Validation Data



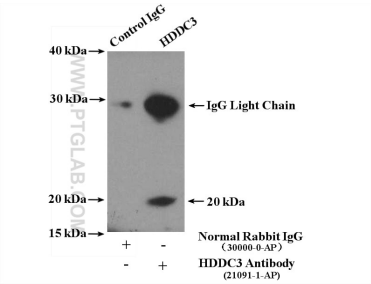
Various lysates were subjected to SDS PAGE followed by western blot with 21091-1-AP (HDDC3 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 21091-1-AP (HDDC3 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 21091-1-AP (HDDC3 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-HDDC3 (IP:21091-1-AP, 4ug; Detection:21091-1-AP 1:500) with HeLa cells lysate 3400ug.