

For Research Use Only

# HDDC3 Polyclonal antibody

Catalog Number: 21091-1-AP **1 Publications**



## Basic Information

<b>Catalog Number:</b> 21091-1-AP	<b>GenBank Accession Number:</b> BC033794	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 350 µg/ml by Nanodrop and 260 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 374659	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> HD domain containing 3	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 179 aa, 20 kDa	
<b>Immunogen Catalog Number:</b> AG15342	<b>Observed MW:</b> 22-25 kDa	

## Applications

<b>Tested Applications:</b> IHC, IP, WB, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB	<b>WB:</b> 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
<b>Species Specificity:</b> human, mouse, rat	<b>IP:</b> HeLa cells,
<b>Cited Species:</b> human	<b>IHC:</b> human prostate cancer tissue, human brain tissue, human breast cancer tissue, human kidney tissue
<b>Note-IHC:</b> <i>suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</i>	

## 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

## Storage

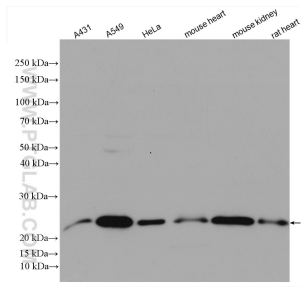
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

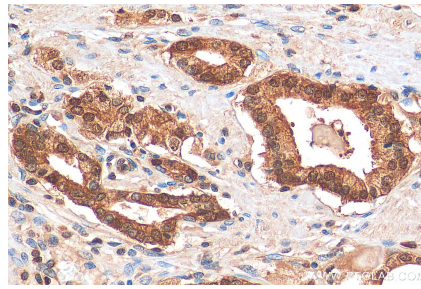
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

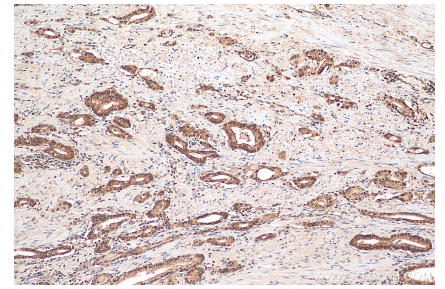
## Selected Validation Data



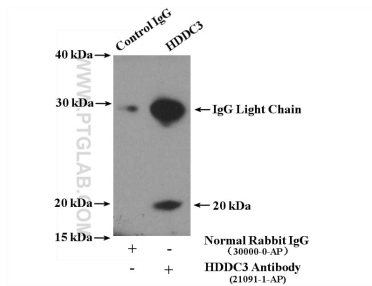
Various lysates were subjected to SDS PAGE followed by western blot with 21091-1-AP (HDDC3 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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.