

For Research Use Only

# Sestrin 2 Monoclonal antibody

Catalog Number: 66297-1-Ig

Featured Product

15 Publications



## Basic Information

<b>Catalog Number:</b> 66297-1-Ig	<b>GenBank Accession Number:</b> BC013304	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul, Concentration: 2800 µg/ml by Nanodrop and 2000 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 83667	<b>CloneNo.:</b> 1A1A4
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P58004	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IHC 1:50-1:500 IF 1:200-1:800
<b>Isotype:</b> IgG1	<b>Full Name:</b> sestrin 2	
<b>Immunogen Catalog Number:</b> AG20638	<b>Calculated MW:</b> 54 kDa	
	<b>Observed MW:</b> 54 kDa	

## Applications

<b>Tested Applications:</b> WB, IF, IHC, ELISA	<b>Positive Controls:</b> WB : HeLa cells, HEK-293T IHC : human colon cancer tissue, IF : HeLa cells,
<b>Cited Applications:</b> WB, IP, IF, IHC, CoIP	
<b>Species Specificity:</b> human, pig, rat	
<b>Cited Species:</b> human, rat, mouse, pig, bovine	

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

## Background Information

Sestrins, including sestrin-1 (PA26), sestrin-2 (Hi95), and sestrin-3, are 48 to 65 kDa cystein sulfinyl reductases and they modulate peroxide signaling and antioxidant defense. These proteins selectively reduce or repair hyperoxidized forms of typical 2-Cys peroxiredoxins within eukaryotes. Expression of these proteins is regulated by p53, a tumor suppressor protein. Sestrin 2 is implicated in the regulation of cell survival, in cellular responses to different stress conditions, and also acts as a positive regulator of autophagy. Sestrin 2 is approximately a 57.6kDa protein (480 amino acids).

## Notable Publications

Author	Pubmed ID	Journal	Application
T Shen	27693501	Osteoarthritis Cartilage	WB,IHC
Jinghui Yang	36306010	Neurochem Res	IF
Sumin Lee	34797495	Arch Pharm Res	WB

## Storage

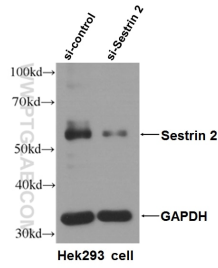
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

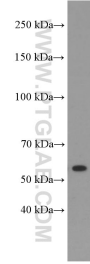
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

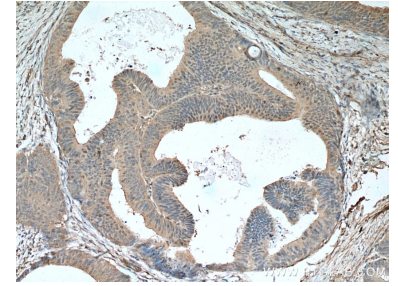
## Selected Validation Data



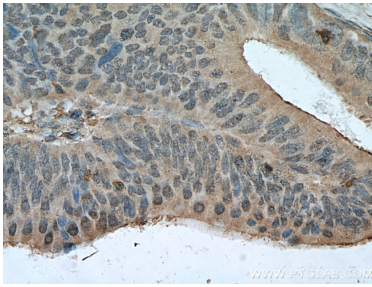
WB result of Sestrin 2 antibody (66297-1-Ig, 1:500) with si-control and si-Sestrin 2 transfected Hek293 cells.



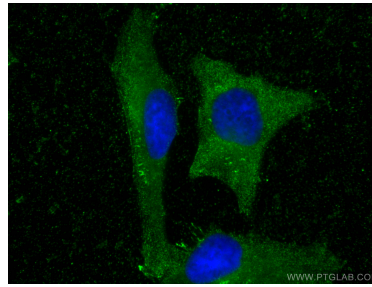
HeLa cells were subjected to SDS PAGE followed by western blot with 66297-1-Ig (Sestrin2 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66297-1-Ig (Sestrin2 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66297-1-Ig (Sestrin2 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Sestrin 2 antibody (66297-1-Ig, Clone: 1A1A4) at dilution of 1:400 and CoralLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).