

For Research Use Only

# citrate synthase Monoclonal antibody

Catalog Number: 67784-1-Ig **2 Publications**



## Basic Information

<b>Catalog Number:</b> 67784-1-Ig	<b>GenBank Accession Number:</b> BC010106	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1431	<b>CloneNo.:</b> 2F9G6
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> O75390	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:500-1:2000 IF-Fro 1:200-1:800 IF/ICC 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Full Name:</b> citrate synthase	
<b>Immunogen Catalog Number:</b> AG9255	<b>Calculated MW:</b> 466 aa, 52 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-Fro, ELISA	<b>Positive Controls:</b> WB : LNCaP cells, HeLa cells, HepG2 cells, HEK-293 cells, Jurkat cells, K-562 cells, HSC-T6 cells, PC-12 cells, NIH/3T3 cells
<b>Cited Applications:</b> WB	<b>IHC :</b> human breast cancer tissue,
<b>Species Specificity:</b> human, mouse, rat	<b>IF-Fro :</b> mouse breast cancer,
<b>Cited Species:</b> human, mouse	<b>IF/ICC :</b> MCF-7 cells, HepG2 cells

**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

Citrate synthase (CS), the first and rate-limiting enzyme of the tricarboxylic acid cycle, plays a key role in regulating energy generation of mitochondrial respiration(PMID:19479947).It belongs to the citrate synthase family. The deduced 466-amino acid protein contains an N-terminal mitochondrial targeting sequence and a motif highly conserved in citrate synthases(PMID:12549038). It can exist as a dimer(PMID:8749851). Northern blot analysis detected no CS expression in thymus and small intestine(PMID:12549038). This antibody is specific to CS.

## Notable Publications

Author	Pubmed ID	Journal	Application
Wanhong Han	39411885	Aging Cell	WB
Sikai Wang	38969639	Cell Death Dis	WB

## Storage

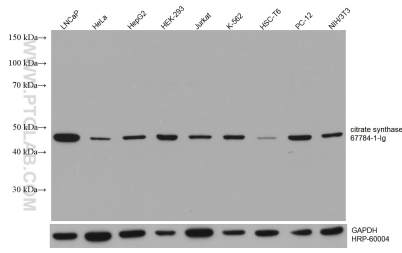
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

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

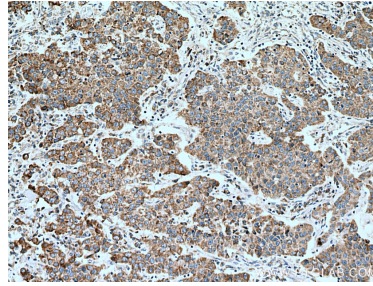
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

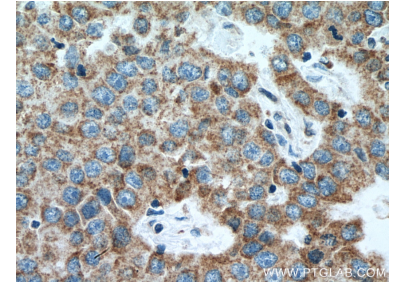
## Selected Validation Data



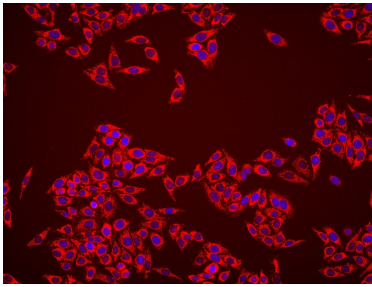
LNCaP cells were subjected to SDS PAGE followed by western blot with 67784-1-Ig (citrate synthase antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



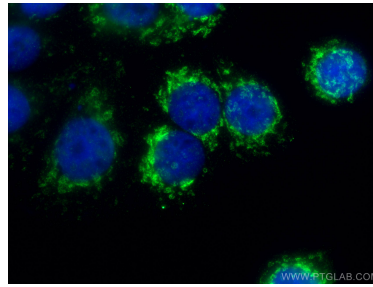
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67784-1-Ig (citrate synthase antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



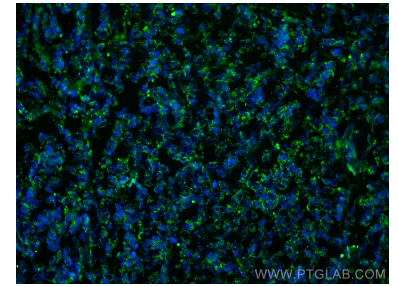
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67784-1-Ig (citrate synthase antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using citrate synthase antibody (67784-1-Ig, Clone: 2F9G6) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using citrate synthase antibody (67784-1-Ig, Clone: 2F9G6) at dilution of 1:800 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). DAPI (blue).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse breast cancer using citrate synthase antibody (67784-1-Ig, Clone: 2F9G6) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).