

For Research Use Only

# SLC7A11/xCT Recombinant monoclonal antibody, PBS Only (Capture)

Catalog Number: 82115-3-PBS



## Basic Information

<b>Catalog Number:</b> 82115-3-PBS	<b>GenBank Accession Number:</b> BC012087	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 23657	<b>CloneNo.:</b> 252789G7
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9UPY5	
<b>Isotype:</b> IgG	<b>Full Name:</b> solute carrier family 7, (cationic amino acid transporter, y+ system) member 11	
<b>Immunogen Catalog Number:</b> AG25431	<b>Calculated MW:</b> 55 kDa	
	<b>Observed MW:</b> 35-40 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, Sandwich ELISA, Indirect ELISA

**Species Specificity:**  
human, mouse

## Product Information

82115-3-PBS targets SLC7A11/xCT as part of a matched antibody pair.

MP03119-1: 82115-3-PBS capture and 82115-4-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

SLC7A11 (also known as xCT) is a membrane transporter involved in the uptake of cystine. It promotes glutathione synthesis through the uptake of cystine and the concomitant release of glutamate. This, in turn, protects cells from oxidative stress, maintains cellular redox balance, and prevents cell death induced by lipid peroxidation. SLC7A11 has been identified as a potential target for cancer therapeutics. It is overexpressed in multiple malignant tumors and is closely associated with the growth, prognosis, metastasis, and treatment response of various cancers including lung cancer. The SLC7A11 protein appears at two molecular weights, 55 kDa and 35 kDa, and the 55 kDa protein is ubiquitinated (PMID: 32188872). 82115-3-RR recognizes the 35-40 kDa protein similar to the paper published (PMID: 36747082).

## Storage

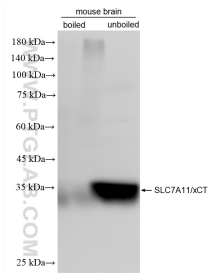
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

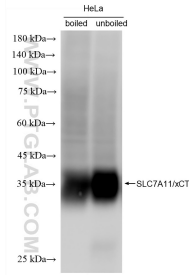
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

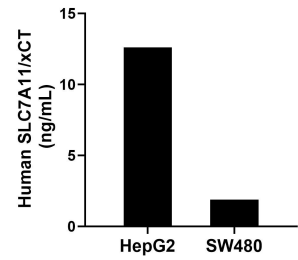
## Selected Validation Data



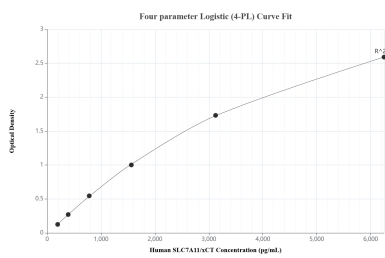
Various lysates were subjected to SDS PAGE followed by western blot with 82115-3-RR (SLC7A11 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82115-3-PBS in a different storage buffer formulation.



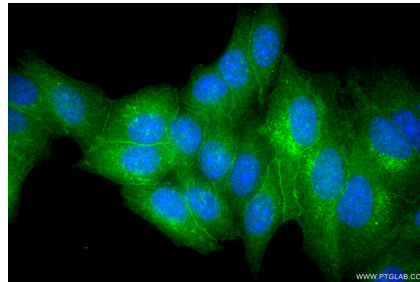
unboiled HeLa cells were subjected to SDS PAGE followed by western blot with 82115-3-RR (SLC7A11/xCT antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82115-3-PBS in a different storage buffer formulation.



The mean SLC7A11/xCT concentration was determined to be 12.6 ng/mL in HepG2 cell extract based on a 1.2 mg/mL extract load and 1.9 ng/mL in SW480 cell extract based on a 3.0 mg/mL extract load.



Sandwich ELISA standard curve of MP03119-1, Human SLC7A11/xCT Recombinant Matched Antibody Pair - PBS only. 82115-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag25431. 82115-4-PBS was HRP conjugated as the detection antibody. Range: 195-6250 pg/mL.



Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using SLC7A11/xCT antibody (82115-3-RR, Clone: 252789G7) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 82115-3-PBS in a different storage buffer formulation.