

## Datasheet: AHP1222

<b>Description:</b>	RABBIT ANTI HUMAN xCT (N-TERMINAL)
<b>Specificity:</b>	xCT (N-TERMINAL)
<b>Other names:</b>	SLC7A11
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	50 µg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			20 - 30ug/ml
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays			▪	

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Antiserum Preparation</b>	Antisera to human xCT were raised by repeated immunisations of rabbit with highly purified antigen. Purified IgG prepared by affinity chromatography.
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.1% Sodium Azide (NaN <sub>3</sub> )

**Stabilisers**

---

**Approx. Protein Concentrations** IgG concentration 1.0mg/ml

---

**Immunogen** Synthetic peptide: N-terminal region of human xCT.

---

**External Database Links****UniProt:**

[Q9UPY5](#) [Related reagents](#)

**Entrez Gene:**

[23657](#) SLC7A11 [Related reagents](#)

---

**RRID** AB\_2270555

---

**Specificity**

**Rabbit anti human xCT (N-terminal) antibody** detects an epitope within the N-terminal (NT) of the cysteine/glutamate transporter xCT, which forms a complex with the 4F2 heavy chain (CD98), via a disulfide bond. This heterodimer forms a Na<sup>+</sup> independent amino acid transport system which leads to the uptake of extracellular L-cystine in conjunction to L-glutamate efflux. This system is thought to play an important role in the protection of neurons and activated macrophages against oxidative stress.

xCT is the receptor which mediates Kaposi's sarcoma herpesvirus (KSHV) cell fusion.

---

**Histology Positive Control Tissue**

Neurons or astrocytes

---

**References**

1. Kaleeba, J.A. & Berger, E.A. (2006) Kaposi's sarcoma-associated herpesvirus fusion-entry receptor: cystine transporter xCT. [Science. 311 \(5769\): 1921-4.](#)
  2. Wang, H. *et al.* (2003) Expression of the activity of cystine/glutamate exchange transporter, system x(c)(-), by xCT and rBAT. [Biochem Biophys Res Commun. 305 \(3\): 611-8.](#)
  3. Jiménez-vidal, M. *et al.* (2004) Thiol modification of cysteine 327 in the eighth transmembrane domain of the light subunit xCT of the heteromeric cystine/glutamate antiporter suggests close proximity to the substrate binding site/permeation pathway. [J Biol Chem. 279 \(12\): 11214-21.](#)
- 

**Storage**

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

---

**Guarantee**

12 months from date of despatch

---

**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

---

## Related Products

### Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)

### Recommended Useful Reagents

[HISTAR DETECTION SYSTEM \(STAR3000A\)](#)

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[100x ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

'M373119:200824'

**Printed on 22 Mar 2021**

---