10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Goat Anti-SLC7A7 / y+LAT-1 Antibody (N Terminus)

Purified Goat Polyclonal Antibody
Catalog # AF4319a

## Product Information

| | |
|---|---|
| **Application** | WB, E |
| **Primary Accession** | Q9UM01 |
| **Other Accession** | NP_001119577.1, 9056 |
| **Reactivity** | Human |
| **Host** | Goat |
| **Clonality** | Polyclonal |
| **Calculated MW** | 55991 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 9056 |
| **Other Names** | SLC7A7; solute carrier family 7 (amino acid transporter light chain, y+L system), member 7; LAT3; LPI; MOP-2; Y+LAT1; y+LAT-1; Y+L amino acid transporter 1; monocyte amino acid permease 2; solute carrier family 7 (cationic amino acid transporter, y+ syste |
| **Target/Specificity** | Reported variants represent identical protein: NP_001119577.1, NP_001119578.1 |
| **Dilution** | WB~~1:1000 E~~N/A |
| **Format** | Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing. |
| **Immunogen** | Peptide with sequence SQPEVETSPLGD-C, from the N Terminus of the protein sequence according to NP_001119577.1. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | Goat Anti-SLC7A7 / y+LAT-1 Antibody (N Terminus) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

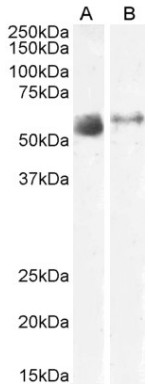
| | |
|---|---|
| **Name** | SLC7A7 ( HGNC:11065) |
| **Function** | Heterodimer with SLC3A2, that functions as an antiporter which operates as an efflux route by exporting cationic amino acids from inside the cells in |

| | |
|---|---|
| | exchange with neutral amino acids plus sodium ions and may participate in nitric oxide synthesis via the transport of L-arginine (PubMed:10080182, PubMed:10655553, PubMed:14603368, PubMed:15756301, PubMed:15776427, PubMed:17329401, PubMed:9829974, PubMed:9878049). Also mediates arginine transport in non-polarized cells, such as monocytes, and is essential for the correct function of these cells (PubMed:15280038, PubMed:31705628). The transport mechanism is electroneutral and operates with a stoichiometry of 1:1 (By similarity). In vitro, Na(+) and Li(+), but also H(+), are cotransported with the neutral amino acids (By similarity). |
| **Cellular Location** | Basolateral cell membrane; Multi-pass membrane protein |
| **Tissue Location** | Highest expression in kidney and peripheral blood leukocytes (PubMed:9829974). Weaker expression is observed in lung, heart, placenta, spleen, testis and small intestine (PubMed:9829974) Expressed in normal fibroblasts and those from LPI patients (PubMed:10080183, PubMed:11078698). Also expressed in HUVECs, monocytes, retinal pigment epithelial cells, and various carcinoma cell lines, with highest expression in a colon-carcinoma cell line (PubMed:11742806, PubMed:15280038, PubMed:17197568, PubMed:17329401) |

## References

Nguyen HT, Merlin D.Nguyen HT, Merlin D.Nguyen HT, Merlin D.Nguyen HT, Merlin D.

## Images




AF4319a (2 µg/ml) staining of Human Lung (A) and Skeletal Muscle (B) lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence