

Product Name: SLC7A11 Rabbit mAb

Catalog #: Z2860-20; Z2860-100

Also Known As: CCBR1; xCTCCBR1; xCTC

**Quantity:** 20 μl for Z2860-20; 100 μl for Z2860-100

**Concentration:** See labels on tube

Host Species: Rabbit Isotype: IgG

Reactivity: Human, Rat

**Immunogen:** A synthesized peptide derived from human SLC7A11.

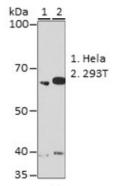
Swiss Prot. #: Q9UPY5
Calculated MW: 55kDa
Detected MW: 37kDa

**Applications:** WB (1:500 - 1:2,000)

IP (not tested)
IHC (not tested)
IF (not tested)

Note: Antibody dilution should be optimized by users.

Images:



Immunoblotting 25  $\mu g$  whole cell extracts of various celllines using SLC7A11 antibody

(Z2860) at 1:1,000 dilution.

**Purification:** Protein A or G affinity purification

**Buffer:** PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

**Storage:** Store at -20°C. Centrifuge to maximize product recovery.

**Background:** SLC7A11 belongs to the amino acid-polyamine-organocation (APC) superfamily. The x(c)(-)

cysteine/glutamate antiporter consists of a light chain subunit (xCT/SLC7A11) that confers substrate specificity and a glycosylated heavy chain subunit (4F2hc/SLC3A2) located on the cell surface. The heterodimeric amino acid transport system x(c)(-) provides selective import of cysteine into cells in exchange for glutamate and regulates intracellular glutathione (GSH) levels, which is essential for cellular protection from oxidative stress. Studies have shown that xCT expression increases in various tumors, including gliomas, and have implicated xCT in GSH-mediated anticancer drug resistance. Also, xCT provides neuroprotection by enhancing

glutathione export from non-neuronal cells.





**Reference:** 1. Sato H, et al. (1999) J Biol Chem 274, 11455-11458.

2. Jiang L, et al. (2015) Nature 520, 57-62.

