Anti-xCT/SLC7A11 Antibody [JE31-93]

HA721868

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP
Molecular Wt:	Predicted band size: 55 kDa
Clone number:	JE31-93

Description: This gene encodes a member of a heteromeric, sodium-independent, anionic amino acid transport system that is highly specific for cysteine and glutamate. In this system, designated Xc(-), the anionic form of cysteine is transported in exchange for glutamate. This protein has been identified as the predominant mediator of Kaposi sarcoma-associated herpesvirus fusion and entry permissiveness into cells. Also, increased expression of this gene in primary gliomas (compared to normal brain tissue) was associated with increased glutamate secretion via the XCT channels, resulting in neuronal cell death.

Immunogen: Synthetic peptide within Human xCT aa 1-50 / 501.

Positive control: HepG2 cell lysate, HeLa cell lysate, 293T cell lysate, Mouse liver tissue lysate, Mouse brain tissue lysate, Rat brain tissue lysate, Rat liver tissue lysate, PC-12 cell lysates.

Subcellular location: Membrane.

Database links: SwissProt: Q9UPY5 Human | Q9WTR6 Mouse
Entrez Gene: 310392 Rat

Recommended Dilutions:

WB	1:1,000
IP	1-2μg/sample

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

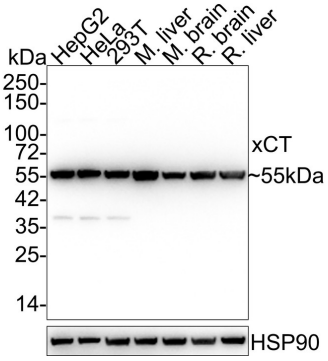

Fig1: Western blot analysis of xCT/SLC7A11 on different lysates with Rabbit anti-xCT/SLC7A11 antibody (HA721868) at 1/1,000 dilution.

Lane 1: HepG2 cell lysate (20 µg/Lane)
Lane 2: HeLa cell lysate (20 µg/Lane)
Lane 3: 293T cell lysate (20 µg/Lane)
Lane 4: Mouse liver tissue lysate (40 µg/Lane)
Lane 5: Mouse brain tissue lysate (40 µg/Lane)
Lane 6: Rat brain tissue lysate (40 µg/Lane)
Lane 7: Rat liver tissue lysate (40 µg/Lane)

Predicted band size: 55 kDa
Observed band size: 55 kDa

Exposure time: 5 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721868) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

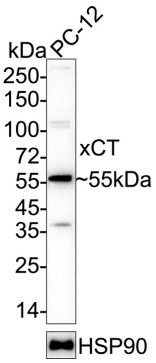

Fig2: Western blot analysis of xCT/SLC7A11 on PC-12 cell lysates with Rabbit anti-xCT/SLC7A11 antibody (HA721868) at 1/1,000 dilution.

Lysates/proteins at 10 µg/Lane.

Predicted band size: 55 kDa
Observed band size: 55 kDa

Exposure time: 1 minute; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721868) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

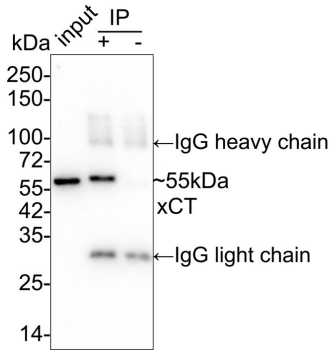

Fig3: xCT/SLC7A11 was immunoprecipitated in 0.2mg HeLa cell lysate with HA721868 at 2 µg/25 µl agarose. Western blot was performed from the immunoprecipitate using HA721868 at 1/1,000 dilution. Anti-Rabbit IgG for IP Nano-secondary antibody (NBI01H) at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: HeLa cell lysate (input)
Lane 2: HA721868 IP in HeLa cell lysate
Lane 3: Rabbit IgG instead of HA721868 in HeLa cell lysate

Blocking/Dilution buffer: 5% NFDM/TBST
Exposure time: 24 seconds; ECL: K1801

Background References

1. Koppula P. et. al. Cystine transporter SLC7A11/xCT in cancer: ferroptosis, nutrient dependency, and cancer therapy. Protein Cell. 2021 Aug
2. Lin W. et. al. SLC7A11/xCT in cancer: biological functions and therapeutic implications. Am J Cancer Res. 2020 Oct