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Anti-xCT Rabbit Monoclonal Antibody

Catalog Number: M03036

Overview

Product Name	Anti-xCT Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-xCT Rabbit Monoclonal Antibody catalog # M03036. Tested in WB, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.
Application	IP, IF, ICC, WB
Clonality	Monoclonal ACGI-19
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9UPY5

Technical Details

Immunogen	A synthesized peptide derived from human xCT
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5mg/ml
Purification	Affinity-chromatography
Suggested Dilutions	WB 1:500-2000 ICC/IF 1:50-200 IP 1:50

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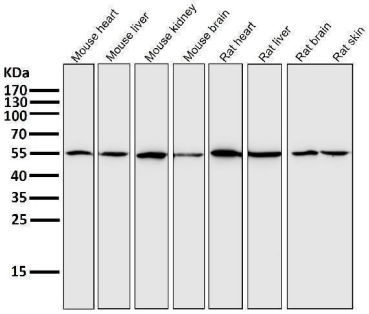
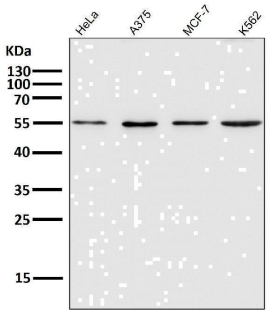
Anti-xCT Rabbit Monoclonal Antibody (M03036) Images



All lanes use the Antibody at 1:1000 dilution for 1 hour at room temperature.



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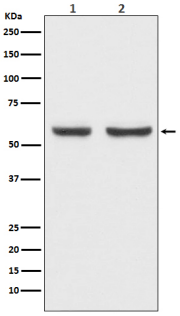
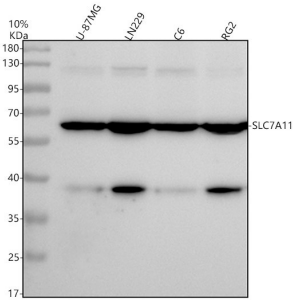


Western blot analysis of xCT expression in (1) HepG2 cell lysate; (2) Mouse brain lysate.



Western blot analysis of SLC7A11 using anti-SLC7A11 antibody (M03036). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: Human U-87MG whole cell lysates, Lane 2: Human LN229 whole cell lysates, Lane 3: Rat C6 whole cell lysates, Lane 4: Rat RG2 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SLC7A11 antigen affinity purified monoclonal antibody (M03036) at a dilution of 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween-20 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for

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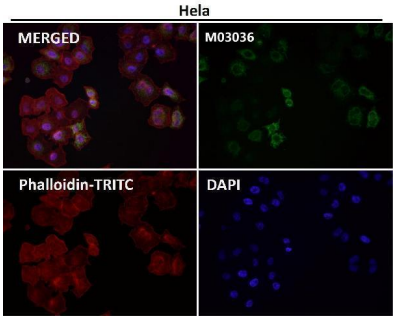
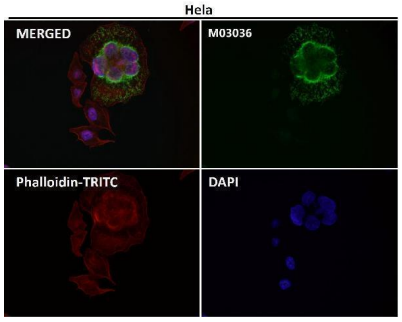
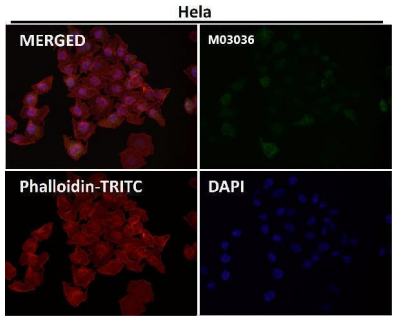
SLC7A11 at approximately 60 kDa. The expected band size for SLC7A11 is at 55 kDa.



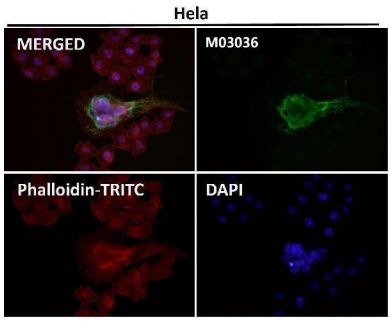
Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.



Immunofluorescent analysis using the Antibody at 1:50 dilution.

ICC/IF analysis of SLC7A11 using anti-SLC7A11 antibody (M03036). SLC7A11 was detected in an immunocytochemical section of rat C6 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes and then treated with a membrane permeabilization agent (AR0205) for 5 minutes.The cells were blocked with 10% goat serum. And then incubated with rabbit anti-SLC7A11 Antibody (M03036) at a dilution of 1:50 overnight at 4°C.

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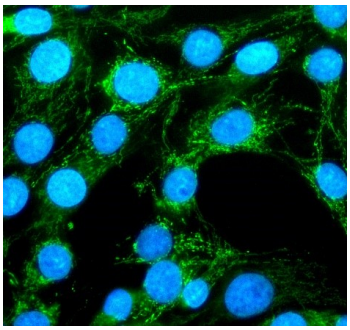
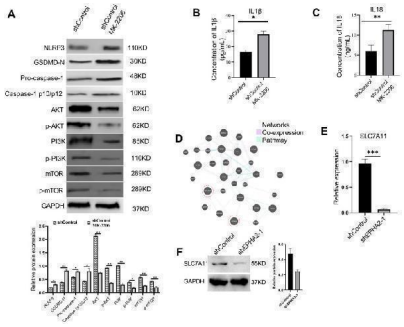
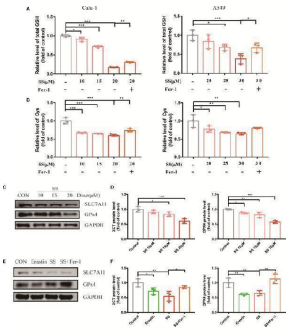


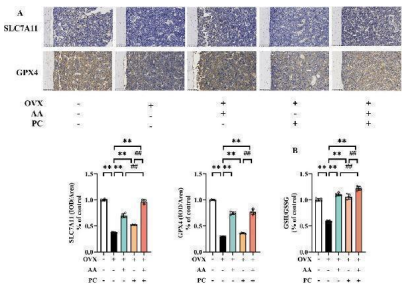
DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



AKT inhibition induced MDA-MB-231 pyroptosis and decrease SLC7A11 expression. (A) Western blot analysis of NLRP3, GSDMD, caspase-1, AKT, p-AKT, PI3K, p-PI3K, mTOR and p-mTOR expression in MDA-MB-231 cells treated with AKT inhibitor or control buffer. * p



SS attenuated the oxidation resistance of LUAD cells. (A, B) GSH or Cys was detected in Calu-1 or A549 cells, which were respectively treated with 10, 15, 20 uM or 20, 25, 30 uM SS for 6 h, and pretreated with or without Fer-1 (1 uM), the data statistic was shown in a histogram (*P < 0.05, **P < 0.01, ***P < 0.001). (C) Western blot analysis was used to detect the expressions of SLC7A11 and GPX4 in Calu-1 cells, which were treated with 10, 15, 20 uM SS for 6 h. (D) Quantitative analysis of gray value of the SLC7A11 and GPX4 blots. (E) Western blotting analysis was used to detect the expressions of SLC7A11 and GPX4 in Calu-1 cells, which were treated with 20 uM SS or 4 uM erastin, with or without Fer-1 (1 uM) for 6 h. (F) Quantitative analysis of gray value of the SLC7A11 and GPX4 blots.Index in PubMed under a CC BY license. PMID: 35664792



AA and PC exerted synergistic effects on regulating GSH metabolism. (A) IHC analysis of SLC7A11 and GPX4 in the femur. (B) GSH/GSSG ratio in tibias. Data are expressed as the mean ± SD (n = 5). ** p < 0.01 compared with the OVX group. ## p < 0.01 compared with the AA/PC group.Index in PubMed under a CC BY license. PMID: 39512823

M2c macrophages increase ferroptosis resistance in gastric cancer cells. a The CCK-8 method was used to detect the survival of gastric cancer cells (Hgc27 and MKN45) intervened with RSL3 for 24 h. b The CCK-8 method was used to detect the survival of gastric cancer cells (Hgc27 and MKN45) intervened with Fer-1 for 24 h. c The expression of SOD in different intervention groups. d The expression of

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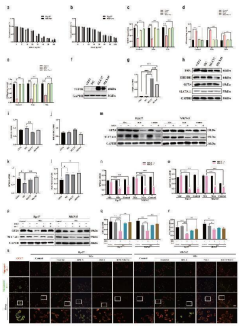

MDA in different intervention groups. e The expression of GSH in different intervention groups. f The expression of TGFbeta1 protein WB in different cell lines. g The expression results of TGFbeta1 protein. h The expression of key ferroptosis proteins WB in different cell lines. i The expression results of FSP1 protein. j Expression results of DHODH protein. k Expression results of GPX4 protein. l SLC7A11 protein expression results. m The intervention of RSL3 on the expression of key ferroptosis protein WB in different co culture groups. n The expression results of GPX4 protein. o SLC7A11 protein expression results. p The WB expression of key proteins involved in ferroptosis in different intervention groups. q The expression results of GPX4 protein. r The expression results of SLC7A11 protein. s Fluorescence results of mitochondrial membrane potential in different intervention groups. Scale bar=50 um. *p

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For Research Use Only. Not for use in diagnostic procedures.