

Anti-SLC7A11 mIgG1 Antibody(1A4-9-3)

Product information

GM-88218AB-10	10 µg
GM-88218AB-100	100 µg
GM-88218AB-1000	1 mg

Antibody Information

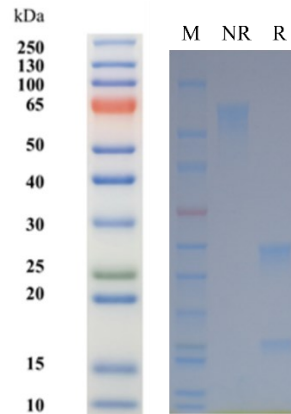
Species Reactivity	Human;
Clone	1A4-9-3
Source/Isotype	Mouse IgG1, Kappa
Application	/
Specificity	Detects SLC7A11
Gene	SLC7A11
Other Names	CCBR1, xCT
Gene ID	23657 (human)
Background	The SLC7A11 gene, as a solute carrier family 7 member 11, encodes the light chain subunit XCT of the cystine/glutamate antiporter Xc-system, which plays a central role in cellular antioxidant defense and ferroptosis regulation. The gene is located on human chromosome 4q28.3 and encodes a 501 amino acid protein containing 12 transmembrane domains, which is expressed by forming a heterodimer with the heavy chain subunit SLC3A2, and a novel transmembrane domain, it mediates the 1:1 exchange of extracellular cystine with intracellular glutamate, maintains intracellular glutathione (GSH) synthesis, and facilitates the production of glutathione (GSH), this protects cells from oxidative stress damage and inhibits ferroptosis, a process of programmed cell death driven by lipid peroxidation. A large number of studies have shown that SLC7A11 is highly expressed in multiple solid malignancies such as breast cancer, pancreatic cancer, glioma, colorectal cancer, and its overexpression is mediated by enhanced GSH synthesis and antioxidant capacity, which provides a theoretical basis for the development of cancer therapy, it can significantly promote the proliferation, survival and metastasis of tumor cells, and is closely related to the resistance of chemotherapy (such as temozolomide and cisplatin), radiotherapy and targeted therapy (such as BRAF inhibitor and enzalutamide)
Storage	Store at 2-8°C short term (1-2 weeks).Store at ≤ -20°C long term. Avoid repeated freeze-thaw.
Formulation	Supplied as a 0.2 µm filtered solution of PBS, pH7.2-7.4.

Version:3.1

Endotoxin

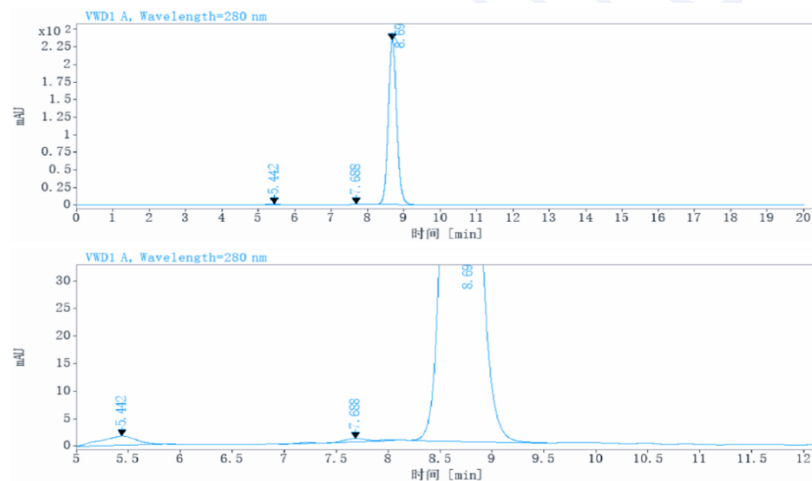
< 1 EU/mg, determined by LAL gel clotting assay

SDS-PAGE



On SDS-PAGE under reducing (R)/non-reducing(N-R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-HPLC



The purity of this product is more than 95% verified by SEC-HPLC.