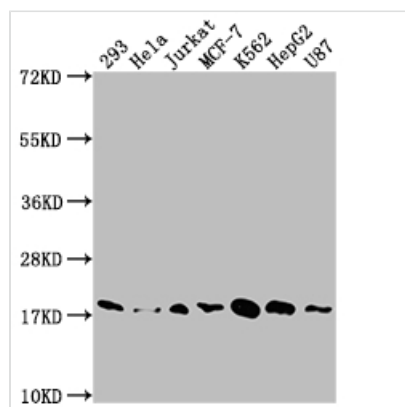




SOD1 Recombinant Monoclonal Antibody

Product Code	CSB-RA829583A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P00441
Immunogen	A synthesized peptide derived from human SOD1
Species Reactivity	Human
Tested Applications	ELISA, WB, FC; Recommended dilution: WB:1:500-1:5000, FC:1:20-1:200
Relevance	Destroys radicals which are normally produced within the cells and which are toxic to biological systems.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cell biology; Metabolism; Signal transduction
Gene Names	SOD1
Clone No.	3E5

Image

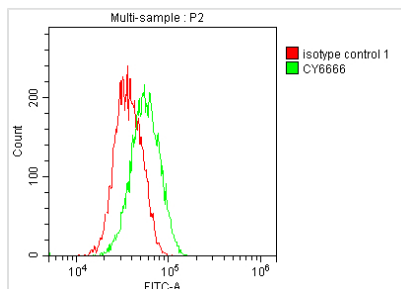


Western Blot

Positive WB detected in: 293 whole cell lysate, HeLa whole cell lysate, Jurkat whole cell lysate, MCF-7 whole cell lysate, K562 whole cell lysate, HepG2 whole cell lysate, U87 whole cell lysate
All lanes: SOD1 antibody at 1:1500

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 16 kDa
Observed band size: 18 kDa



Overlay histogram showing Jurkat cells stained with CSB-RA829583A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody ($1\mu\text{g}/1 \times 10^6$ cells) for 1 h at 4?. The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min at 4?. Control antibody (green line) was Rabbit IgG ($1\mu\text{g}/1 \times 10^6$ cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The SOD1 recombinant monoclonal antibody can be used to detect human SOD1 protein in ELISA, WB, and FC applications. It is produced using recombinant DNA technology, starting with the synthesis of the gene coding for the SOD1 monoclonal antibody after sequencing the cDNA of the SOD1 antibody-producing hybridomas. These hybridomas are generated by fusing B cells from an animal immunized with a synthesized peptide derived from human SOD1 with myeloma cells. After cloning the synthesized gene into a vector, the recombinant vector is transfected into cells for cultivation. The resulting SOD1 recombinant monoclonal antibody is purified using affinity chromatography from the cell culture supernatant.

The SOD1 protein is an antioxidant enzyme that plays a key role in protecting cells from oxidative stress. It works by converting superoxide radicals, which are highly reactive molecules that can damage cells, into less harmful molecules. SOD1 is found in the cytoplasm of cells and is particularly abundant in the brain and spinal cord, where it helps protect neurons from oxidative damage. Mutations in the SOD1 gene are associated with the development of familial amyotrophic lateral sclerosis (ALS).