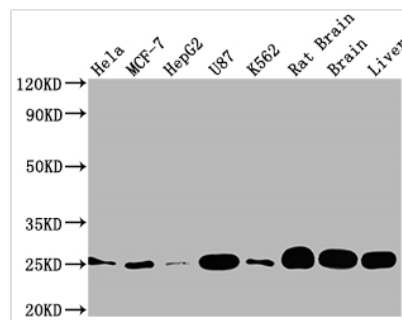




# SOD2 Antibody

<b>Product Code</b>	CSB-RA633872A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P04179
<b>Immunogen</b>	A synthesized peptide derived from human SOD2
<b>Species Reactivity</b>	Human, Rat
<b>Tested Applications</b>	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
<b>Relevance</b>	Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Neuroscience; Cancer; Cardiovascular; Cell biology; Metabolism; Signal transduction
<b>Gene Names</b>	SOD2
<b>Accession NO.</b>	10F6

## Image

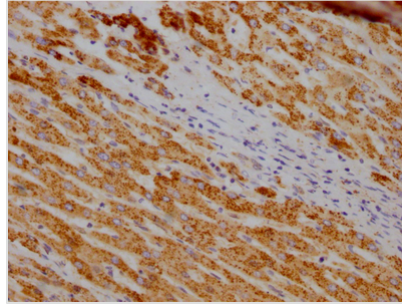


### Western Blot

Positive WB detected in: HeLa whole cell lysate, MCF-7 whole cell lysate, HepG2 whole cell lysate, U87 whole cell lysate, K562 whole cell lysate, Rat brain tissue, Brain tissue, Liver tissue  
All lanes: SOD2 antibody at 1:2000

### Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution  
Predicted band size: 25, 21, 19, 20 kDa  
Observed band size: 25 kDa



IHC image of CSB-RA633872A0HU diluted at 1:100 and staining in paraffin-embedded human liver cancer performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

## Description

SOD2 is a mitochondrial-specific antioxidant enzyme that scavenges and accelerates the dismutation of superoxide anion produced by respiratory chain enzymes into H<sub>2</sub>O<sub>2</sub> and oxygen in mitochondria. It thus constitutes a first-line defense against ROS in mitochondria. It plays a vital role in the maintenance of vascular function and is essential for blocking neurodegeneration and astrocyte activation. In the brain, SOD2 is required for perinatal survival by protecting against oxidative stress.

The main steps in the production of this SOD2 recombinant antibody include immunization; harvest of positive spleen cells; obtaining the antibody sequence by screening and sequencing; expression of the target antibody in mammalian cells; purification. The SOD2 antibody was produced recombinantly and has many advantages: high reproducibility, specificity and scalability. And has been validated in ELISA, WB, IHC.