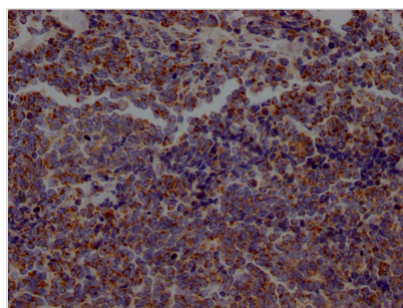




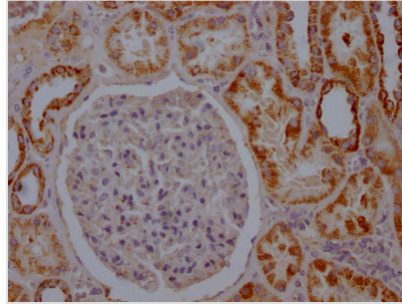
ACO2 Recombinant Monoclonal Antibody

Product Code	CSB-RA218127A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q99798
Immunogen	A synthesized peptide derived from human Aconitase 2
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	Catalyzes the isomerization of citrate to isocitrate via cis-aconitate.
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	Tags & Cell Markers; Metabolism; Signal transduction
Gene Names	ACO2
Clone No.	8H4

Image



IHC image of CSB-RA218127A0HU diluted at 1:100 and staining in paraffin-embedded human lung cancer performed on a Leica BondTM 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° overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA218127A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica Bond™ 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? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The ACO2 recombinant monoclonal antibody is produced in four steps. The ACO2 monoclonal antibody gene is first sequenced and then cloned into a plasmid vector. Secondly, the recombinant vector is introduced into a host cell line. Thirdly, the ACO2 recombinant monoclonal antibody is purified from the cell culture supernatant using affinity chromatography. Finally, the purified antibody is tested and characterized. The ACO2 monoclonal antibody is derived from ACO2 antibody-producing hybridomas, and during production, a synthesized peptide derived from human ACO2 is used as the immunogen. The ACO2 recombinant monoclonal antibody is recommended for use in detecting human ACO2 protein through ELISA and IHC applications.

The ACO2 protein, also known as mitochondrial aconitase, plays a key role in the tricarboxylic acid (TCA) cycle, also known as the Krebs cycle or citric acid cycle. Specifically, ACO2 catalyzes the conversion of citrate to isocitrate, which is a critical step in the cycle that produces energy in the form of ATP. In addition to its role in the TCA cycle, ACO2 also has iron regulatory functions and can function as an RNA-binding protein in the cytoplasm.