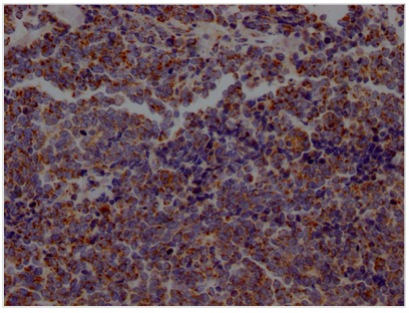
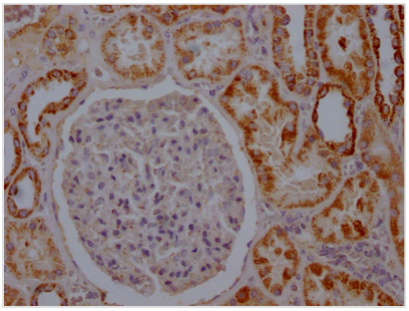
ACO2 Antibody

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
Accession 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°C 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 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°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

ACO2 is a mitochondrial protein that catalyzes the conversion of citrate to isocitrate within the tricarboxylic acid cycle (TCA). It is critically involved in the function of the tricarboxylic acid cycle (TCA), the maintenance of iron homeostasis, oxidative stress defense, and the integrity of mitochondrial DNA (mtDNA). Mutations in the ACO2 gene were identified in patients suffering from a broad range of symptoms, including optic nerve atrophy, cortical atrophy, cerebellar atrophy, hypotonia, seizures, and intellectual disabilities. Due to its crucial function in central metabolic pathways, ACO2 is reported to play a role in various metabolic diseases such as diabetes or oncological ailments, as well as neurodegenerative diseases.

Compared with the polyclonal and monoclonal antibodies of ACO2, this ACO2 recombinant antibody has the features of increased reproducibility and control, animal-free technology, high degree of monovalency, high batch-to-batch consistency, easier isotype conversion, etc. And it has been validated in ELISA, IHC.