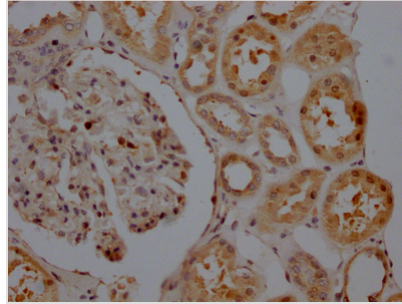




SIRT5 Antibody

Product Code	CSB-RA156557A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q9NXA8
Immunogen	A synthesized peptide derived from human SIRT5
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	NAD-dependent lysine demalonylase, desuccinylase and deglutarylase that specifically removes malonyl, succinyl and glutaryl groups on target proteins (PubMed:21908771, PubMed:22076378, PubMed:24703693). Activates CPS1 and contributes to the regulation of blood ammonia levels during prolonged fasting: acts by mediating desuccinylation and deglutarylation of CPS1, thereby increasing CPS1 activity in response to elevated NAD levels during fasting (PubMed:22076378, PubMed:24703693). Activates SOD1 by mediating its desuccinylation, leading to reduced reactive oxygen species (PubMed:24140062). Modulates ketogenesis through the desuccinylation and activation of HMGCS2 (By similarity). Has weak NAD-dependent protein deacetylase activity; however this activity may not be physiologically relevant in vivo. Can deacetylate cytochrome c (CYCS) and a number of other proteins in vitro such as UOX.
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	Epigenetics and Nuclear Signaling; Cancer; Cardiovascular; Metabolism
Gene Names	SIRT5
Accession NO.	9H12
Image	



IHC image of CSB-RA156557A0HU 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°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

SIRT5 is a mitochondrial sirtuin primarily expressed in the brain, heart, liver, and kidney. In addition to deacetylase activity, SIRT5 also has demalonylase and desuccinylase activity. It is responsible for the removal of succinyl, malonyl, and glutaryl groups from protein targets within the mitochondrial matrix and other subcellular compartments. SIRT5 is involved in oxidative stress regulation and cardiac physiology and plays an important role in cellular metabolism, detoxification, energy production, and mediation of the apoptosis pathway.

The main steps in the production of this SIRT5 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 SIRT5 antibody was produced recombinantly and has many advantages: high reproducibility, specificity and scalability. And has been validated in ELISA, IHC.