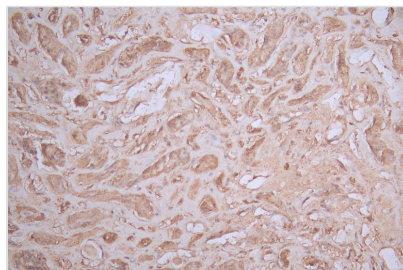




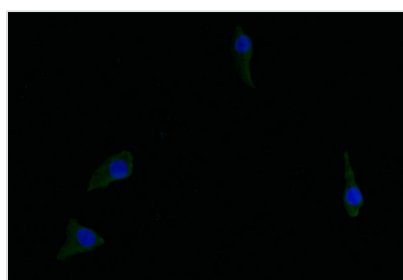
ASS1 Recombinant Monoclonal Antibody

Product Code	CSB-RA095825A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P00966
Immunogen	A synthesized peptide derived from Human ASS1
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF, FC; Recommended dilution: IHC:1:50-1:200, IF:1:50-1:200, FC:1:50-1:200
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;Metabolism;Signal transduction
Gene Names	ASS1
Clone No.	18G11

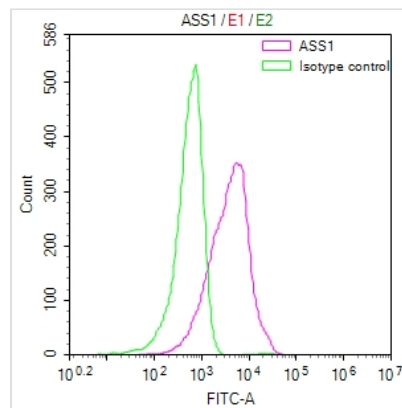
Image



IHC image of CSB-RA095825A0HU 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 polymer IgG labeled by HRP and visualized using 0.56% DAB.



Immunofluorescence staining of Hela with CSB-RA095825A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 516-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing Jurkat cells stained with CSB-RA095825A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1 μ g/1*10⁶cells) for 45min at 4 $^{\circ}$. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4 $^{\circ}$. Control antibody (green line) was rabbit IgG (1 μ g/1*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

Through the utilization of in vitro expression systems, the ASS1 recombinant monoclonal antibody is synthesized by cloning DNA sequences of ASS1 antibodies sourced from immunoreactive rabbits. The immunogen employed in this process is a synthesized peptide derived from the human ASS1 protein. Subsequently, the genes encoding the ASS1 antibodies are inserted into plasmid vectors, and these recombinant plasmid vectors are then transfected into host cells to enable antibody expression. The ASS1 recombinant monoclonal antibody undergoes affinity-chromatography purification and is rigorously tested for functionality in ELISA, IHC, IF, and FC applications, displaying reactivity with the human ASS1 protein during these assessments.

The primary function of the ASS1 protein is to participate in the urea cycle and arginine synthesis. ASS1 plays a crucial role in detoxifying ammonia, synthesizing arginine, and maintaining nitrogen balance in the body. Dysregulation or deficiency of ASS1 can lead to metabolic disorders associated with ammonia toxicity and arginine deficiency.