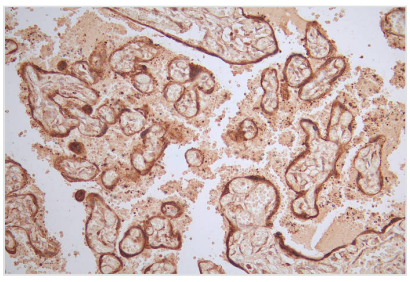
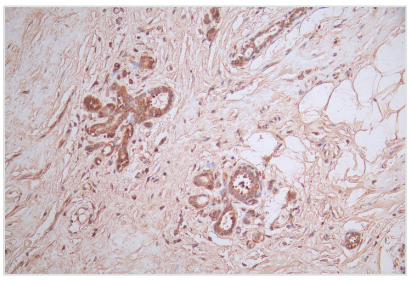
HSD3B1 Recombinant Monoclonal Antibody

Product Code	CSB-RA071064A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P14060
Immunogen	A synthesized peptide derived from Human HSD3B1
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	HSD3B1
Clone No.	10G2

Image

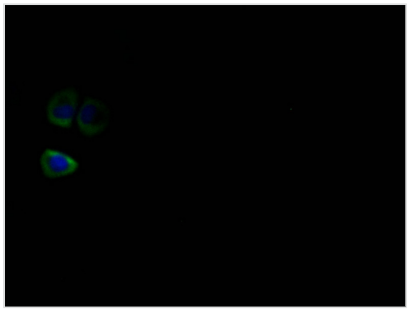


IHC image of CSB-RA071064A0HU diluted at 1:100 and staining in paraffin-embedded human placenta tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at 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 0.50% DAB.

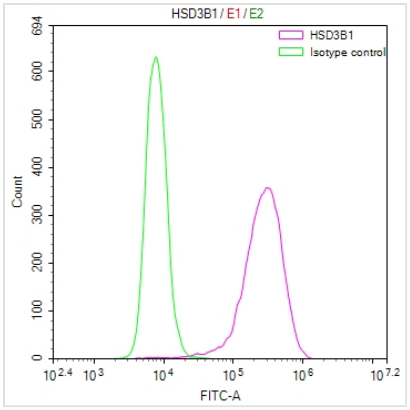


IHC image of CSB-RA071064A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and

visualized using 0.50% DAB.



Immunofluorescence staining of Hela with CSB-RA071064A0HU 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 514-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing 293 cells stained with CSB-RA071064A0HU (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 (1μg/1*10^{6}cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1μg/1*10^{6}cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

Through the utilization of in vitro expression systems, the HSD3B1 recombinant monoclonal antibody is synthesized by cloning DNA sequences of HSD3B1 antibodies sourced from immunoreactive rabbits. The immunogen employed in this process is a synthesized peptide derived from the human HSD3B1 protein. Subsequently, the genes encoding the HSD3B1 antibodies are inserted into plasmid vectors, and these recombinant plasmid vectors are then transfected into host cells to enable antibody expression. The HSD3B1 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 HSD3B1 protein during these assessments.

HSD3B1 is a key enzyme in steroidogenesis, catalyzing the conversion of pregnenolone to progesterone. Its activity is essential for the production of various steroid hormones, including sex steroids, glucocorticoids, and mineralocorticoids, which have critical roles in reproductive function, stress response, and various physiological processes in both males and females.