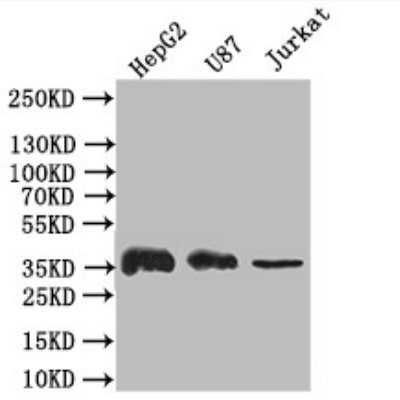
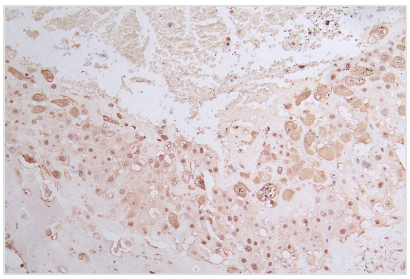
GAPDH Recombinant Monoclonal Antibody

Product Code	CSB-RA009232MA1HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P04406
Immunogen	Recombinant Human GAPDH protein
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, IF, FC; Recommended dilution: WB:1:1000-1:5000, IHC:1:20-1:200, IF:1:20-1:200, FC:1:20-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Isotype/Loading Controls;Neuroscience?Cancer;Metabolism;Signal transduction
Gene Names	GAPDH
Clone No.	9B1

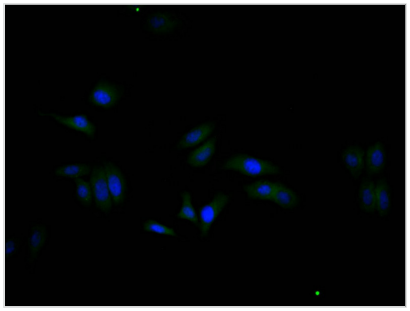
Image



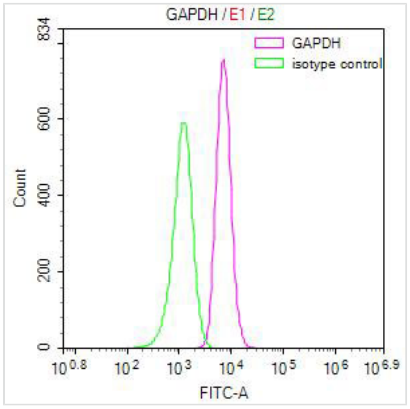
Western Blot
Positive WB detected in: HepG2 whole cell lysate,U87 whole cell lysate,JK whole cell lysate
All lanes: GAPDH antibody at 1:500
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 36 kDa
Observed band size: 36 kDa



IHC image of CSB-RA009232MA1HU diluted at 1:50 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 0.05% DAB.



Immunofluorescence staining of HepG2 cell with CSB-RA009232MA1HU at 1:20, 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 4C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing Hela cells surface stained with CSB-RA009232MA1HU (red line) at 1:50. The cells were fixed in 4% formaldehyde (15min) and permeated by 0.2% TritonX-100 for 10min. Then 10% normal goat serum was Incubated to block non-specific protein-protein interactions followed by the antibody (1μg /1*10^6cells) for 45 min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/200 dilution for 35 min at 4 °C. Isotype control antibody (green line) was mouse IgG1 (1μg/1*10^6cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The production of the GAPDH recombinant monoclonal antibody involves acquiring the GAPDH antibody genes, introducing these genes into suitable host cells, and employing a cellular expression and translation system to manufacture GAPDH antibodies. This approach offers several benefits, including a substantial enhancement in the purity and stability of the synthesized GAPDH recombinant monoclonal antibodies, along with improvements in antibody affinity and specificity. After synthesis, the GAPDH recombinant monoclonal antibody undergoes purification through affinity chromatography and undergoes extensive testing, including ELISA, WB, IHC, IF, and FC assays. Importantly, this antibody specifically targets the human GAPDH protein.

GAPDH's primary role is in glycolysis, where it participates in energy production and NADH generation. It also has diverse functions in cellular regulation, redox signaling, apoptosis, and RNA metabolism.