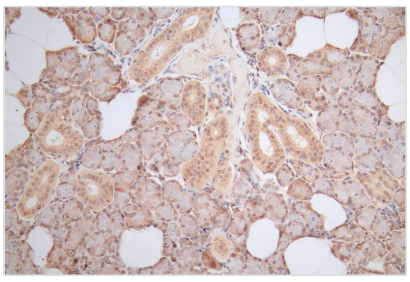
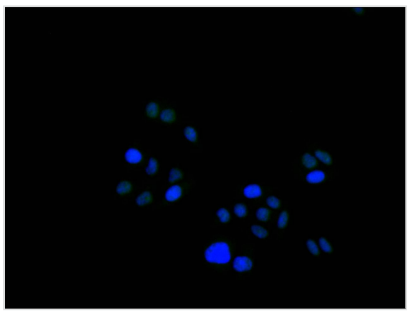
HMGB1 Recombinant Monoclonal Antibody

Product Code	CSB-RA010553MA1HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P09429
Immunogen	Recombinant Human HMGB1 protein
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF, FC; Recommended dilution: 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	Mouse IgG2a
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	HMGB1
Clone No.	1E7

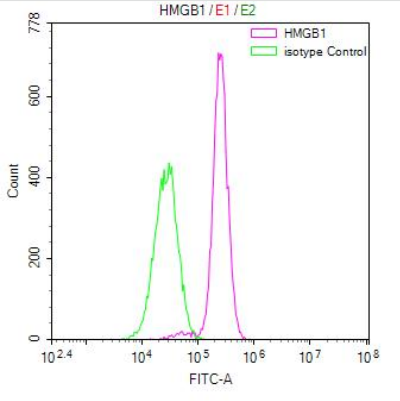
Image



IHC image of CSB-RA010553MA1HU diluted at 1:100 and staining in paraffin-embedded human salivary gland 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-Mouse IgG labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of Hela cell with CSB-RA010553MA1HU at 1:200, 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 FITC-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Overlay Peak curve showing Hela cells stained with CSB-RA010553MA1HU (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

To produce the HMGB1 recombinant monoclonal antibody, the HMGB1 antibody genes were integrated into plasmid vectors. These engineered plasmid vectors were subsequently introduced into appropriate host cells using exogenous protein expression techniques, facilitating antibody production. Following this production phase, the HMGB1 recombinant monoclonal antibody underwent purification via affinity chromatography. Rigorous validation was carried out to confirm the suitability of this HMGB1 recombinant monoclonal antibody for various applications, including ELISA, IHC, and FC.

HMGB1 is a nuclear protein that can be released from cells and act as an extracellular signaling molecule. HMGB1 protein has diverse functions, including its role in DNA binding, chromatin organization, inflammation, immunity, cell survival, tissue repair, cancer, and neuronal function.