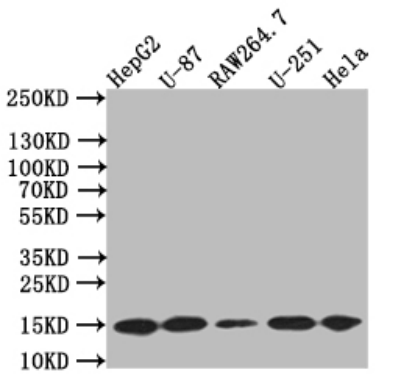
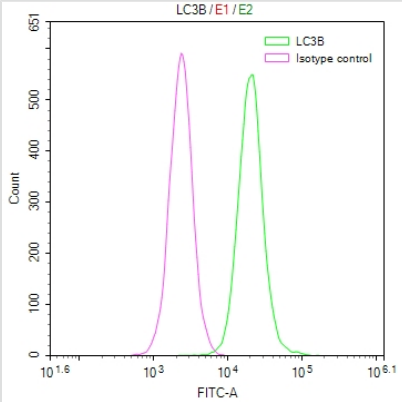
MAP1LC3B Recombinant Monoclonal Antibody

Product Code	CSB-RA551427A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q9GZQ8
Immunogen	A synthesized peptide derived from Human MAP1LC3B
Species Reactivity	Human
Tested Applications	ELISA, WB, FC; Recommended dilution: WB:1:500-1:2000, 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	Neuroscience?Cancer?Cardiovascular;Metabolism;Signal transduction
Gene Names	MAP1LC3B
Clone No.	7D11

Image



Western Blot
Positive WB detected in: HepG2 whole cell lysate,U87 whole cell lysate,RAW264.7 whole cell lysate,U251 whole cell lysate,Hela whole cell lysate
All lanes: LC3B antibody at 1:500
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 15 kDa
Observed band size: 15 kDa



Overlay Peak curve showing Hela cells stained with CSB-RA551427A0HU (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

The MAP1LC3B recombinant monoclonal antibody is generated via a meticulously executed process. It initiates with in vitro cloning, where genes encoding both the heavy and light chains of the MAP1LC3B antibody are incorporated into expression vectors, which are subsequently introduced into host cells, setting the stage for the recombinant antibody's expression within a cell culture environment. Following expression, the MAP1LC3B recombinant monoclonal antibody undergoes purification from the supernatant of transfected host cell lines, relying on the precision of affinity chromatography. An outstanding attribute of this antibody is its specific binding affinity for the human MAP1LC3B protein. Additionally, it is known for its versatility, making it suitable for an array of applications, including ELISA, WB, and FC.

MAP1LC3B is a critical protein in the autophagy pathway, where it plays a central role in autophagosome formation, cargo recognition, and autophagosome-lysosome fusion. It is also involved in quality control mechanisms within cells. MAP1LC3B helps remove damaged organelles, misfolded proteins, and protein aggregates, contributing to the maintenance of cellular health and preventing the accumulation of potentially harmful materials.