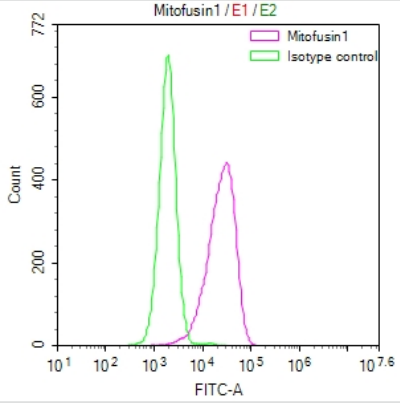
MFN1 Recombinant Monoclonal Antibody

Product Code	CSB-RA574476A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q8IWA4
Immunogen	A synthesized peptide derived from Human MFN1
Species Reactivity	Human
Tested Applications	ELISA, FC; Recommended dilution: 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;Tags & Cell Markers;Metabolism;Signal transduction
Gene Names	MFN1
Clone No.	11G8

Image



Overlay Peak curve showing HepG2 cells stained with CSB-RA574476A0HU (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*10^6cells) 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*10^6cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The MFN1 recombinant monoclonal antibody is a product of a comprehensive production process. This journey begins with in vitro cloning, where the genes responsible for both the heavy and light chains of the MFN1 antibody are seamlessly integrated into expression vectors. Subsequently, these vectors are introduced into host cells, facilitating the recombinant antibody's expression within a cell culture environment. After expression, the MFN1 recombinant monoclonal antibody is subjected to a rigorous purification process, drawing on

the capabilities of affinity chromatography. A noteworthy characteristic of this antibody is its specific reactivity with the human MFN1 protein. Additionally, its versatility shines through as it is suitable for ELISA and FC applications.

MFN1 protein mainly facilitates mitochondrial fusion by tethering the outer membranes of adjacent mitochondria together, thus allowing them to fuse and exchange contents, including proteins and lipids. MFN1 is implicated in regulating mitochondrial dynamics, including the balance between fusion and fission, which is essential for cellular homeostasis and adaptation to various cellular stress conditions.