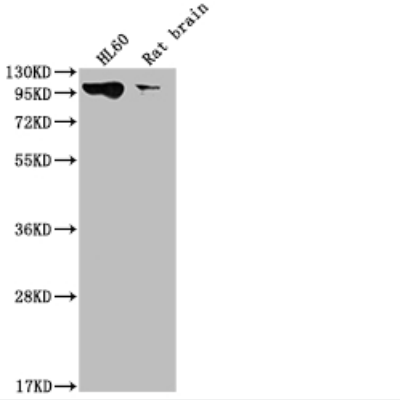
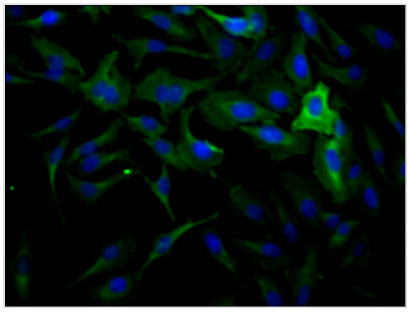
DNM2 Recombinant Monoclonal Antibody

Product Code	CSB-RA877222A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P50570
Immunogen	A synthesized peptide derived from human Dynamin 2
Species Reactivity	Human, Rat
Tested Applications	ELISA, WB, IF, FC; Recommended dilution: WB:1:500-1:5000, IF:1:20-1:200, FC:1:20-1:200
Relevance	Microtubule-associated force-producing protein involved in producing microtubule bundles and able to bind and hydrolyze GTP. Plays a role in the regulation of neuron morphology, axon growth and formation of neuronal growth cones (By similarity). Plays an important role in vesicular trafficking processes, in particular endocytosis. Involved in cytokinesis (PubMed:12498685). Regulates maturation of apoptotic cell corpse-containing phagosomes by recruiting PIK3C3 to the phagosome membrane (By similarity).
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; Signal transduction
Gene Names	DNM2
Clone No.	1D8

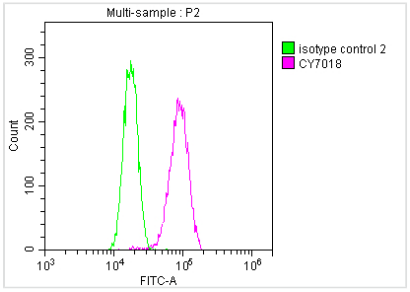
Image



Western Blot
Positive WB detected in: HL60 whole cell lysate, Rat brain tissue
All lanes: DNM2 antibody at 1:2000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 99, 98 kDa
Observed band size: 99 kDa



Immunofluorescence staining of Hela Cells with CSB-RA877222A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Overlay histogram showing Hela cells stained with CSB-RA877222A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followedby the antibody (1µg/1*10^6 cells) for 1 h at 4?.The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min 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

DNM2 is a force-generating GTPase that catalyzes membrane constriction and fission. It is involved in endocytosis and intracellular membrane trafficking. Charcot-Marie-Tooth disease (CMT) and centronuclear myopathy (CNM), both autosomal-dominant motor illnesses, are linked to mutations in the DNM2 gene. DNM2 involvement, via mutations or overexpression, has been found in an increasing number of malignancies and is frequently linked to dismal prognosis.

The recombinant DNM2 antibody is a monoclonal antibody generated by cloning DNM2 antibody genes into plasma vectors and transfecting vector clones into stable cell lines for production. For recombinant antibody generation, mammalian cell lines like CHO cells and HEK293 are commonly used. The recombinant DNM2 antibody was purified using Affinity-chromatography. It has verified to detect DNM2 protein from Human, Rat in the ELISA, WB, IF, FC.