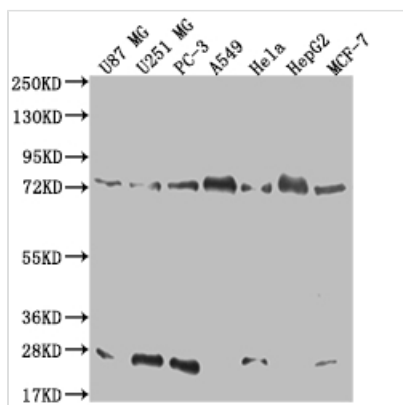




CAPN2 Recombinant Monoclonal Antibody

Product Code	CSB-RA899086A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P17655
Immunogen	A synthesized peptide derived from human CAPN2
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:2000
Relevance	Calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction. Proteolytically cleaves MYOC at 'Arg-226' (PubMed:17650508). Proteolytically cleaves CPEB3 following neuronal stimulation which abolishes CPEB3 translational repressor activity, leading to translation of CPEB3 target mRNAs (By similarity). {ECO:0000250 UniProtKB:O08529, ECO:0000269 PubMed:17650508}.
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	Cancer; Cell biology; Metabolism; Signal transduction
Target Names	CAPN2
Clone No.	17E9

Image



Western Blot

Positive WB detected in: U87 whole cell lysate, U251 whole cell lysate, PC3 whole cell lysate, A549 whole cell lysate, HeLa whole cell lysate, HepG2 whole cell lysate, MCF-7 whole cell lysate

All lanes: CAPN2 antibody at 1:500

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 80, 72 kDa

Observed band size: 72-95 kDa



Description

The generation of the CAPN2 recombinant monoclonal antibody involves a well-defined process. Initially, B cells are isolated from an animal immunized with a synthesized peptide derived from human CAPN2, prompting an immune response and subsequent B cell harvest. Total RNA is extracted from these B cells, and cDNA synthesis is performed using reverse transcription. The CAPN2 antibody genes are then amplified via PCR, utilizing specific primers targeting the antibody constant regions. Subsequently, the amplified genes are cloned into an expression vector. Through transfection, the recombinant vector carrying the CAPN2 antibody genes is introduced into host cells to enable antibody production. The resulting CAPN2 recombinant monoclonal antibodies are harvested from the cell culture supernatant and purified using affinity chromatography. To validate their quality, the purified CAPN2 recombinant monoclonal antibody undergoes rigorous characterization, including ELISA and WB analysis, confirming their specific reactivity to human CAPN2 protein.

Usage

For Research Use Only. Not for use in diagnostic or therapeutic procedures.