

Product datasheet for TA504345BM

OriGene Technologies, Inc.

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Calpain 2 (CAPN2) Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI1F4]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1F4
Applications: FC, WB

Reactivity: WB 1:500~2000, FLOW 1:100 Human, Rat, Monkey, Mouse

Host: Mouse IgG2a

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human CAPN2(NP_001739) produced in HEK293T

cell

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol.

Concentration: 0.5 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: HRP

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 79.8 kDa

Gene Name: calpain 2

Database Link: NP 001739

Entrez Gene 12334 MouseEntrez Gene 29154 RatEntrez Gene 703047 MonkeyEntrez Gene 824

<u>Human</u> P17655



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Background: The calpains, calcium-activated neutral proteases, are nonlysosomal, intracellular cysteine

proteases. The mammalian calpains include ubiquitous, stomach-specific, and muscle-specific proteins. The ubiquitous enzymes consist of heterodimers with distinct large, catalytic subunits associated with a common small, regulatory subunit. This gene encodes the large subunit of the ubiquitous enzyme, calpain 2. Multiple heterogeneous transcriptional start sites in the 5' UTR have been reported. Two transcript variants encoding different isoforms

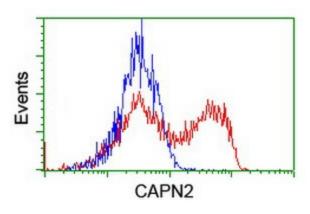
have been found for this gene. [provided by RefSeq, Mar 2009]

Synonyms: CANP2; CANPL2; CANPml; mCANP

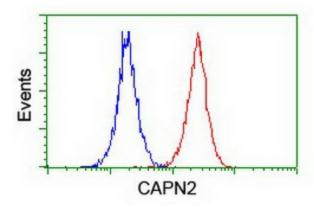
Protein Families: Druggable Genome, Protease

Protein Pathways: Alzheimer's disease, Apoptosis, Focal adhesion

Product images:

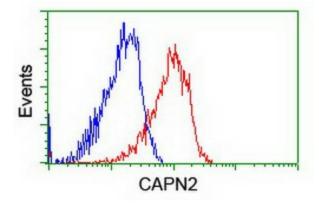


HEK293T cells transfected with either [RC205642] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-CAPN2 antibody ([TA504345]), and then analyzed by flow cytometry.

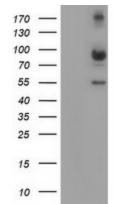


Flow cytometric Analysis of Jurkat cells, using anti-CAPN2 antibody ([TA504345]), (Red), compared to a nonspecific negative control antibody, (Blue).

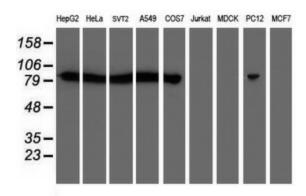




Flow cytometric Analysis of Hela cells, using anti-CAPN2 antibody ([TA504345]), (Red), compared to a nonspecific negative control antibody, (Blue).

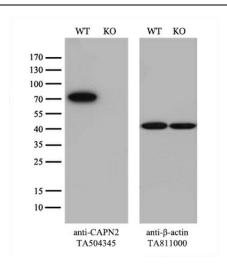


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CAPN2 ([RC205642], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CAPN2 ([TA504345]). Positive lysates [LY400662] (100ug) and [LC400662] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-CAPN2 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

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Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and CAPN2-Knockout 293T cells (KO, Cat# [LC841490]) were separated by SDS-PAGE and immunoblotted with anti-CAPN2 monoclonal antibody [TA504345], (1:500). Then the blotted membrane was stripped and reprobed with antib-actin antibody ([TA811000]) as a loading control.