

ARG40277 anti-Calpain 1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Calpain 1
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Hrs
Tested Application	ICC/IF, IHC-Fr, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Calpain 1
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 312-326 of Human Calpain 1. (EWNNVDPYERDQLRV)
Conjugation	Un-conjugated
Alternate Names	EC 3.4.22.52; CANP1; Calpain-1 large subunit; Calpain-1 catalytic subunit; Calpain mu-type; muCANP; Cell proliferation-inducing gene 30 protein; Micromolar-calpain; CANP 1; CANP; muCL; CANPL1; Calcium-activated neutral proteinase 1

Application Instructions

Application table	Application	Dilution
	ICC/IF	0.5 - 1 µg/ml
	IHC-Fr	1:200 - 1:1000
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml
Application Note	IHC-P: Antigen Retrieval: By heat mediation. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 80 kDa	

Properties

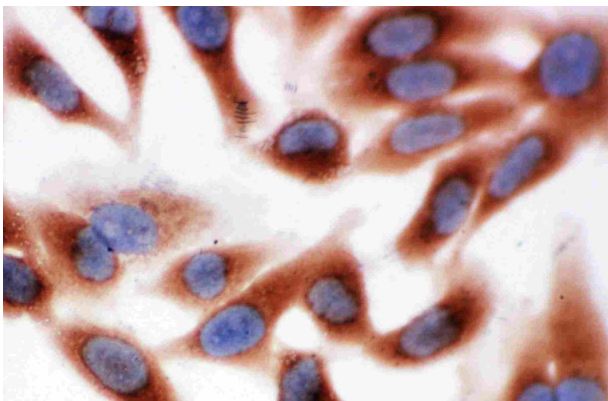
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Thimerosal and 0.05% Sodium azide
Stabilizer	5% BSA

Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

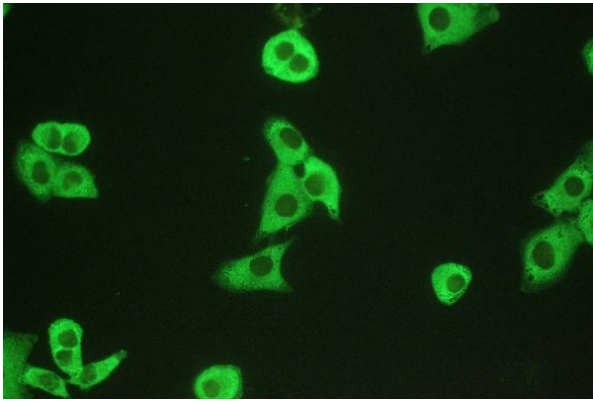
Gene Symbol	CAPN1
Gene Full Name	calpain 1, (mu/I) large subunit
Background	The calpains, calcium-activated neutral proteases, are nonlysosomal, intracellular cysteine proteases. The mammalian calpains include ubiquitous, stomach-specific, and muscle-specific proteins. The ubiquitous enzymes consist 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 1. Several transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Nov 2010]
Function	Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction. [UniProt]
Calculated Mw	82 kDa
PTM	Undergoes calcium-induced successive autoproteolytic cleavages that generate a membrane-bound 78 kDa active form and an intracellular 75 kDa active form. Calpastatin reduces with high efficiency the transition from 78 kDa to 75 kDa calpain forms. [UniProt]
Cellular Localization	Cytoplasm. Cell membrane. Note=Translocates to the plasma membrane upon Ca(2+) binding. In granular keratinocytes and in lower corneocytes, colocalizes with FLG and FLG2 (PubMed:21531719). [UniProt]

Images



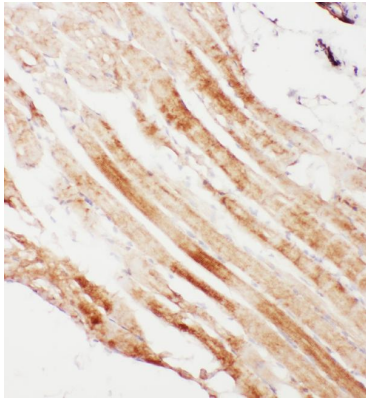
ARG40277 anti-Calpain 1 antibody ICC/IF image

Immunocytochemistry: HeLa cells stained with ARG40277 anti-Calpain 1 antibody.



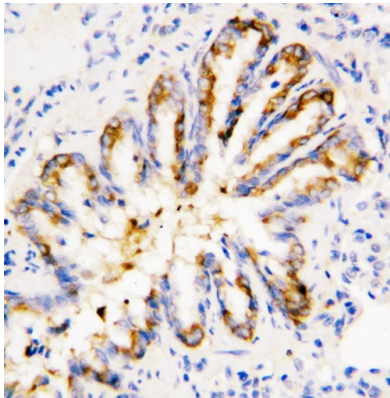
ARG40277 anti-Calpain 1 antibody ICC/IF image

Immunofluorescence: A549 cells were blocked with 10% goat serum and then stained with ARG40277 anti-Calpain 1 antibody (green) at 5 µg/ml dilution, overnight at 4°C.



ARG40277 anti-Calpain 1 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Rat cardiac muscle tissue. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40277 anti-Calpain 1 antibody at 1 µg/ml dilution, overnight at 4°C.



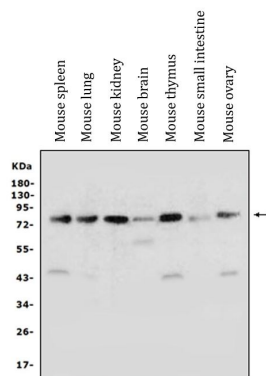
ARG40277 anti-Calpain 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat lung stained with ARG40277 anti-Calpain 1 antibody.



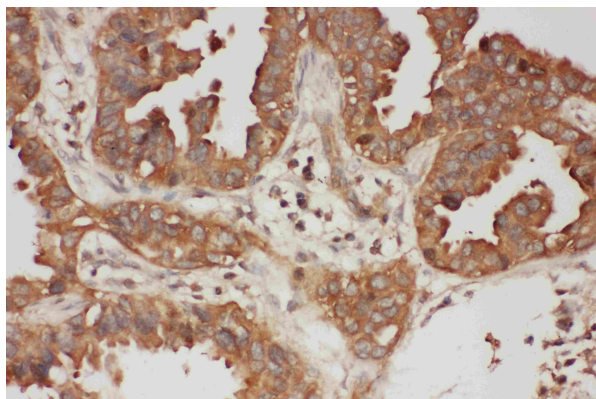
ARG40277 anti-Calpain 1 antibody WB image

Western blot: HT1080 and COLO320 cell lysates stained with ARG40277 anti-Calpain 1 antibody.



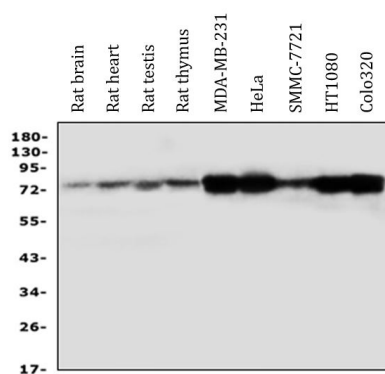
ARG40277 anti-Calpain 1 antibody WB image

Western blot: 50 µg of sample under reducing conditions. Mouse spleen, Mouse lung, Mouse kidney, Mouse brain, Mouse thymus, Mouse small intestine and Mouse ovary lysates stained with ARG40277 anti-Calpain 1 antibody at 0.5 µg/ml dilution, overnight at 4°C.



ARG40277 anti-Calpain 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer stained with ARG40277 anti-Calpain 1 antibody.



ARG40277 anti-Calpain 1 antibody WB image

Western blot: 50 µg of sample under reducing conditions. Rat brain, Rat heart, Rat testis, Rat thymus, MDA-MB-231, HeLa, SMMC-7721, HT1080 and Colo320 whole cell lysates stained with ARG40277 anti-Calpain 1 antibody at 0.5 µg/ml dilution, overnight at 4°C.