

# Product datasheet

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# ARG40288 anti-Calpain 1 antibody

Package: 50 μg Store at: -20°C

### **Summary**

Product Description Goat Polyclonal antibody recognizes Calpain 1

Tested Reactivity Hu

Tested Application IHC-P, WB

Host Goat

**Clonality** Polyclonal

Isotype IgG

Target Name Calpain 1

Species Human

Immunogen Synthetic peptide around the internal region of Human Calpain 1. (NP\_005177.2. C-SEKSAGTVELDD)

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
	IHC-P	5 μg/ml
	WB	0.3 - 1 μg/ml
Application Note	WB: Recommend incubate at RT for 1h. IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). * 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 purified

Buffer Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 0.5% 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/l) 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

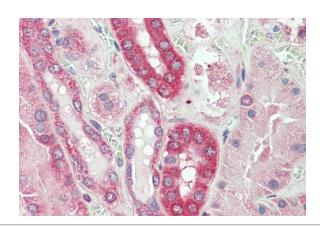
transition from 78 kDa to 75 kDa calpain forms. [UniProt]

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).

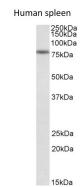
[UniProt]

#### **Images**



#### ARG40288 anti-Calpain 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human kidney tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG40288 anti-Calpain 1 antibody at 5  $\mu$ g/ml dilution followed by AP-staining.



#### ARG40288 anti-Calpain 1 antibody WB image

Western blot: 35  $\mu g$  of Human spleen lysate (in RIPA buffer) stained with ARG40288 anti-Calpain 1 antibody at 0.3  $\mu g/ml$  dilution and incubated at RT for 1 hour.

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