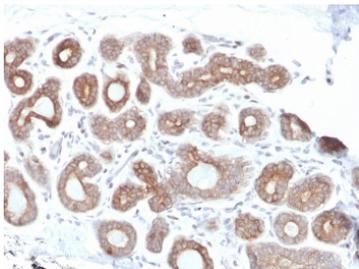


## Calpain Antibody / CAPN1 [clone CAPN1/1530] (V8178)

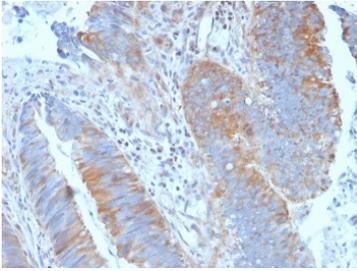
Catalog No.	Formulation	Size
V8178-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8178-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8178SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

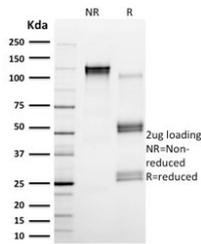
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG1, kappa
<b>Clone Name</b>	CAPN1/1530
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	P07384
<b>Localization</b>	Cell surface, cytoplasmic
<b>Applications</b>	Immunohistochemistry (FFPE) : 1-2ug/ml
<b>Limitations</b>	This Calpain antibody is available for research use only.



IHC staining of FFPE human breast carcinoma with Calpain antibody (clone CAPN1/1530). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human colon carcinoma with Calpain antibody (clone CAPN1/1530). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free Calpain antibody (clone CAPN1/1530) as confirmation of integrity and purity.

## Description

Calpain 1 is an intracellular calcium-dependent protease that cleaves cytoskeletal and sub-membranous proteins. Calpains are non-lysosomal, calcium-activated intracellular cysteine proteases. Calpains mediate specific  $Ca^{2+}$ -dependent processes including cell fusion, mitosis and meiosis. Calpains are heterodimers of a small regulatory subunit and one of three large catalytic subunits, designated Calpain 1, Calpain 2 and Calpain p94. Calpastatin regulates Calpain by inhibiting both the proteolytic activity of Calpain and its binding to membranes. Calpastatin exists in two types, tissue type and erythrocyte type, resulting from both alternative splicing and proteolytic processing. Calpain 1 co-localizes with human leukocyte antigen-DR (HLA-DR) on activated microglia in the aging brain. Calpain influences the process of spermatogenesis and the events preceding fertilization, such as the acrosome reaction.

## Application Notes

Optimal dilution of the Calpain antibody should be determined by the researcher.

## Immunogen

A recombinant full-length human CAPN1 protein was used as the immunogen for this Calpain antibody.

## Storage

Store the Calpain antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).