

# **Calpain 1 Antibody**

Mouse Monoclonal Antibody [Clone CAPN1/1530]

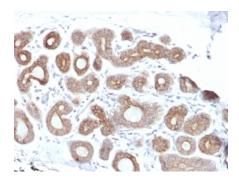
Catalog No	Format	Size
823-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
823-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
823-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

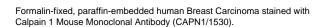
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

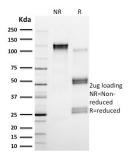
Product Details			
Clone	CAPN1/1530		
Gene Name	CAPN1		
Immunogen	Recombinant full-length human CAPN1 protein		
Host	Mouse		
Clonality	Monoclonal		
Isotype / Light Chain	IgG1 / Kappa		
Mol. Weight of Antigen	~80kDa		
Cellular Localization	Cell membrane, Cytoplasm		
Species Reactivity	Human		
Positive Control	HeLa cells. Skin or Tonsil.		

<sup>\*</sup>Optimal dilution for a specific application should be determined.

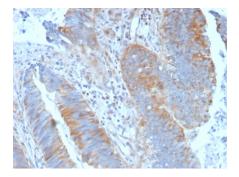
## **Product Images for Calpain 1 Antibody**







SDS-PAGE Analysis of Purified Calpain 1 Mouse Monoclonal Antibody (CAPN1/1530). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Calpain 1 Mouse Monoclonal Antibody (CAPN1/1530).

#### **Specificity & Comments**

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 Ca2+- 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.

#### **Supplied As**

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### **Storage and Stability**

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

#### **Research Areas**

Basal Cell Marker, Cardiovascular, Defective Intrinsic Apoptosis, Developmental Biology, Immunology, Infectious Disease, Neuroscience

#### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

