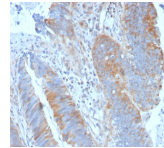


Calpain 1 Monoclonal Mouse Antibody (CAPN1/1530)



Product 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 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. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Product attributes

Antibody number	#1530
Antibody reactivity (target)	Calpain 1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	CAPN1/1530
Isotype	IgG1, kappa
Molecular weight	~80 kDa
Synonyms	Calpain 1; Calcium dependent protease small subunit 1; Calcium-activated neutral proteinase 1; Calpain 1 large subunit; Calpain mu-type; Calpain-1 catalytic subunit; CANP1; CANPL1; CAPN1
Human gene symbol	CAPN1
Entrez gene ID	823
SwissProt	P07384
Unigene	502842
Immunogen	Recombinant full-length human CAPN1 protein
Antibody target cellular localization	Cytoplasmic, Plasma membrane
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Positive control	HeLa cells. Skin or Tonsil.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Antibody research areas	Cytoskeleton

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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