### For Research Use Only

# CAPN3 Monoclonal antibody

Catalog Number:67366-1-lg 1 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

67366-1-lg BC004883 GeneID (NCBI): Size:

CloneNo.: 150ul, Concentration: 2000 ug/ml by 825 1G12A5

Nanodrop: **UNIPROT ID:** Recommended Dilutions: P20807 WB 1:1000-1:6000 Mouse IHC 1:50-1:500 Full Name: IF/ICC 1:1000-1:4000 Isotype: calpain 3, (p94) lgG1 Calculated MW:

Immunogen Catalog Number: 18 kDa AG13179 Observed MW:

90-105 kDa, 55-60 kDa, 30-35 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, ELISA Cited Applications:

WB. IP

Species Specificity:

human, mouse, rat, pig

**Cited Species:** human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Positive Controls:** 

WB: human skeletal muscle tissue, pig skeletal muscle tissue, rat skeletal muscle tissue, mouse

**Purification Method:** 

Protein A purification

skeletal muscle tissue

IHC: mouse skeletal muscle tissue.

IF/ICC: U2OS cells.

## **Background Information**

Calpain 3 (CAPN3), a major intracellular protease, is a muscle-specific member of the calpain large subunit family that specifically binds to titin. CAPN3 plays a role in the dysferlin protein complex and that disruption of CAPN3 function may affect muscle membrane repair and remodeling. CAPN3 has some isoforms with MW of 94, 84, 93, 36,  $18\,k\text{Da. CAPN3}\,autolysis\,generates\,a\,small\,N\text{-}terminal\,fragment\,of}\,34\,k\text{Da}\,and\,a\,l\,arge\,C\text{-}terminal\,fragment\,whose$ size ranges from 55 to 60 kDa during self-processing (PMID: 9794799, 14645524).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Yichen Hou	38104240	Mol Ther	WB,IP

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

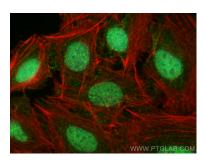
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

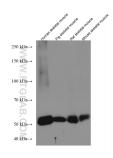
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## **Selected Validation Data**



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using CAPN3 antibody (67366-1-lg, Clone: 1G12A5) at dilution of 1:2000 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-phalloidin (red).



Various lysates were subjected to SDS PAGE followed by western blot with 67366-1-1g (CAPN3 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded mouse skeletal muscle tissue slide using 67366-1-Ig (CAPN3 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse skeletal muscle tissue slide using 67366-1-Ig (CAPN3 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).