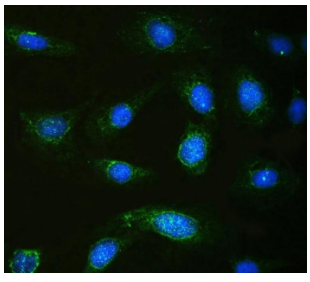
Calpastatin Antibody (R32585)

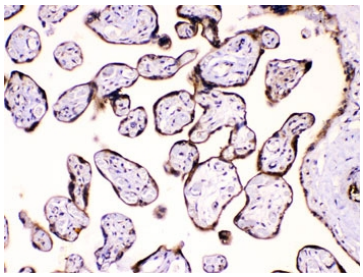
Catalog No.	Formulation	Size
R32585	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

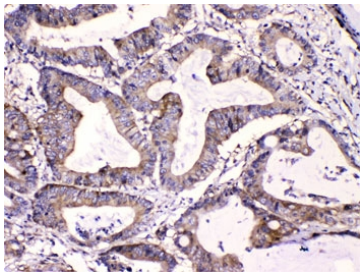
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P20810
Localization	Cytoplasmic
Applications	Western blot: 0.5-1ug/ml Flow cytometry: 1-3ug/10^6 cells Immunohistochemistry (FFPE): 1-2ug/ml Immunofluorescence (FFPE): 2-4ug/ml
Limitations	This Calpastatin antibody is available for research use only.



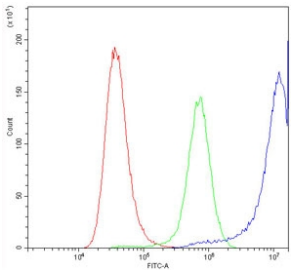
Immunofluorescent staining of FFPE human U-2 OS cells with Calpastatin antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



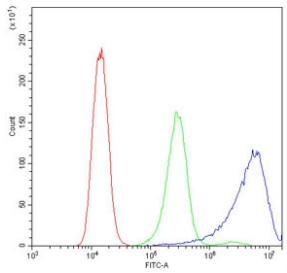
IHC testing of FFPE human placenta tissue with Calpastatin antibody at 1ug/ml. HIER: steam section in pH6 citrate buffer for 20 min.



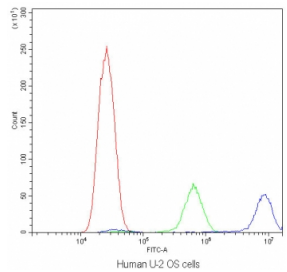
IHC testing of FFPE human intestinal cancer tissue with Calpastatin antibody at 1ug/ml. HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human A549 cells with Calpastatin antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=Calpastatin antibody.



Flow cytometry testing of human A431 cells with Calpastatin antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=Calpastatin antibody.



Flow cytometry testing of human U-2 OS cells with Calpastatin antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=Calpastatin antibody.



Western blot testing of human COLO320 cell lysate with Calpastatin antibody at 0.5ug/ml. Predicted molecular weight: 76 kDa but routinely observed at ~110 kDa.

Description

Calpastatin is a protein that in humans is encoded by the CAST gene. It is mapped to 5q15. The protein encoded by this gene is an endogenous calpain (calcium-dependent cysteine protease) inhibitor. It consists of an N-terminal domain L and four repetitive calpain-inhibition domains (domains 1-4), and it is involved in the proteolysis of amyloid precursor protein. The calpain/calpastatin system is involved in numerous membrane fusion events, such as neural vesicle exocytosis and platelet and red-cell aggregation. The encoded protein is also thought to affect the expression levels of genes encoding structural or regulatory proteins. Alternatively spliced transcript variants encoding different isoforms have been described.

Application Notes

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

Immunogen

Amino acids 275-310 (QEKKRKVEKDTMSDQALEALSASLGTRQAEPELDLR-human) were used as the immunogen for the Calpastatin antibody.

Storage

After reconstitution, the Calpastatin antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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