

For Research Use Only

Calpastatin Polyclonal antibody, PBS Only

Catalog Number: 12250-1-PBS



Basic Information

Catalog Number: 12250-1-PBS	GenBank Accession Number: BC013579	Purification Method: Antigen affinity purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 831	
Source: Rabbit	UNIPROT ID: P20810	
Isotype: IgG	Full Name: calpastatin	
Immunogen Catalog Number: AG2897	Calculated MW: 667 aa, 72 kDa	
	Observed MW: 110 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), IP, Indirect ELISA

Species Specificity:
human

Background Information

Calpastatin (CAST) is an endogenous protein that specifically inhibits the activity of calpains, a family of calcium-dependent proteases involved in numerous cellular processes. The CAST gene encodes calpastatin, which contains multiple calpain-inhibiting domains that bind to the active site of calpain, preventing it from performing its functions. Calpastatin is found in the cytosol and plays a key role in regulating intracellular proteolysis, with malfunctions in the calpain-calpastatin system linked to various diseases, including autoimmune disorders and neurodegenerative conditions.

Storage

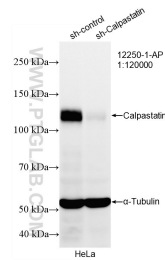
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

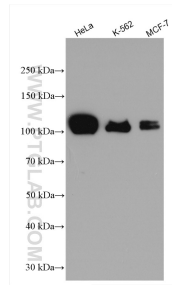
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

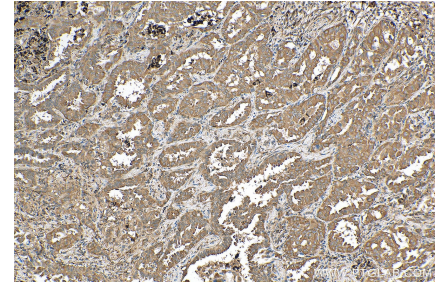
Selected Validation Data



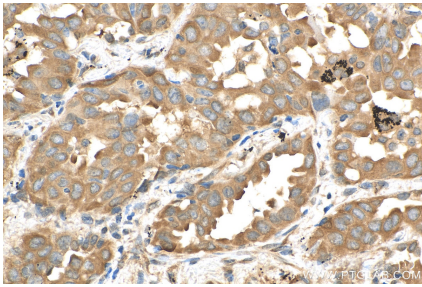
WB result of Calpastatin antibody (12250-1-AP; 1:120000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Calpastatin transfected HeLa cells. This data was developed using the same antibody clone with 12250-1-PBS in a different storage buffer formulation.



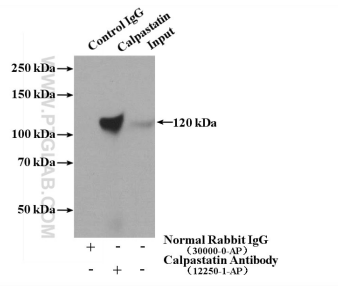
Various lysates were subjected to SDS PAGE followed by western blot with 12250-1-AP (Calpastatin antibody) at dilution of 1:7000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 12250-1-PBS in a different storage buffer formulation.



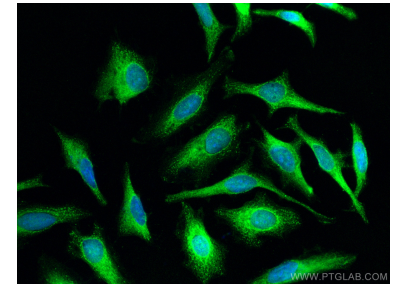
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 12250-1-AP (Calpastatin antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 12250-1-PBS in a different storage buffer formulation.



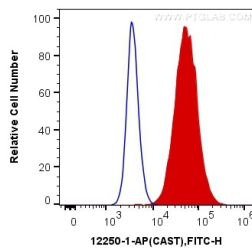
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 12250-1-AP (Calpastatin antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 12250-1-PBS in a different storage buffer formulation.



IP result of anti-Calpastatin (IP:12250-1-AP, 4ug; Detection:12250-1-AP 1:1000) with K-562 cells lysate 4000ug. This data was developed using the same antibody clone with 12250-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using Calpastatin antibody (12250-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 12250-1-PBS in a different storage buffer formulation.



1x10⁶ HeLa cells were intracellularly stained with 0.2 ug Anti-Human Calpastatin (12250-1-AP) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer. This data was developed using the same antibody clone with 12250-1-PBS in a different storage buffer formulation.