

For Research Use Only

Calpastatin Recombinant monoclonal antibody, PBS Only

Catalog Number: 86664-3-PBS



Basic Information

Catalog Number: 86664-3-PBS	GenBank Accession Number: BC013579	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 831	CloneNo.: 251652G2
Source: Rabbit	UNIPROT ID: P20810	
Isotype: IgG	Full Name: calpastatin	
Immunogen Catalog Number: AG2897	Calculated MW: 667 aa, 72 kDa	
	Observed MW: 110-130 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, 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

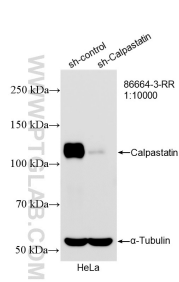
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

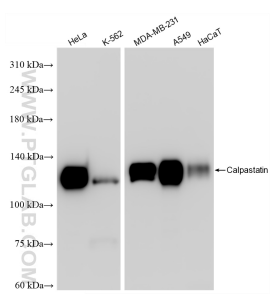
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

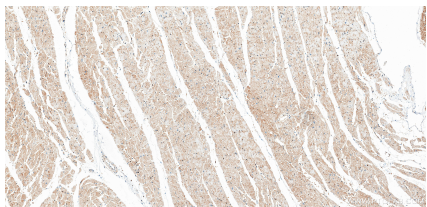
Selected Validation Data



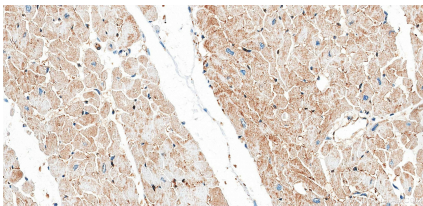
WB result of Calpastatin antibody (86664-3-RR; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Calpastatin transfected HeLa cells. This data was developed using the same antibody clone with 86664-3-PBS in a different storage buffer formulation.



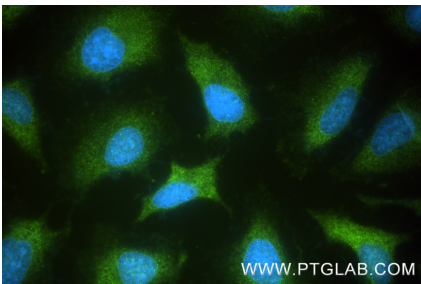
Various lysates were subjected to SDS PAGE followed by western blot with 86664-3-RR (CAST antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86664-3-PBS in a different storage buffer formulation.



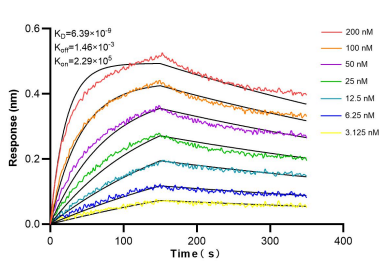
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 86664-3-RR (Calpastatin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86664-3-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 86664-3-RR (Calpastatin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86664-3-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Calpastatin antibody (86664-3-RR, Clone: 251652G2) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 86664-3-PBS in a different storage buffer formulation.



Bi-layer interferometry (BLI) kinetic assays of 86664-3-RR against Human Calpastatin were performed. The affinity constant is 6.39 nM.