

For Research Use Only

Calpastatin Recombinant monoclonal antibody, PBS Only

Catalog Number: 86664-3-PBS



Basic Information

Catalog Number:

86664-3-PBS

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG2897

GenBank Accession Number:

BC013579

GeneID (NCBI):

831

UNIPROT ID:

P20810

Full Name:

calpastatin

Calculated MW:

667 aa, 72 kDa

Observed MW:

110-130 kDa

Purification Method:

Protein A purification

CloneNo.:

251652G2

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.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS only, pH7.3

For technical support and original validation data for this product please contact:

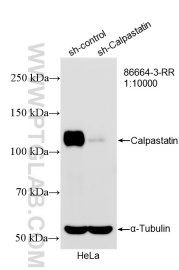
T: 4006900926

E: Proteintech-CN@ptglab.com

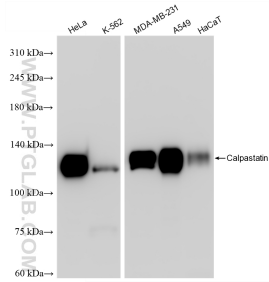
W: ptgcn.com

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

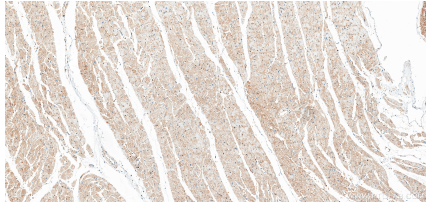
Selected Validation Data



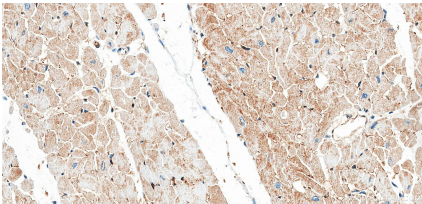
WB result of Calpastatin antibody (86664-3-RR; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Calpastatin transfected HeLa cells. This data was developed using the same antibody clone with 86664-3-PBS in a different storage buffer formulation.



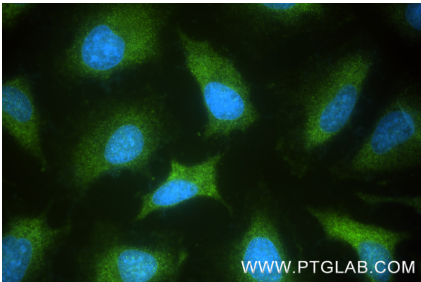
Various lysates were subjected to SDS PAGE followed by western blot with 86664-3-RR (CAST antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86664-3-PBS in a different storage buffer formulation.



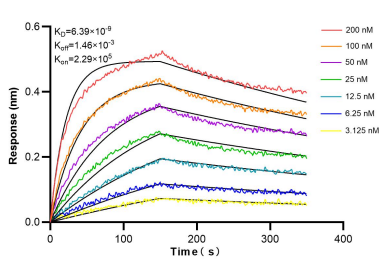
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 86664-3-RR (Calpastatin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86664-3-PBS in a different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