

For Research Use Only

Cathepsin K Polyclonal antibody

Catalog Number: 11239-1-AP **70 Publications**



Basic Information

Catalog Number:

11239-1-AP

Size:

550 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1761

GenBank Accession Number:

BC016058

GeneID (NCBI):

1513

UNIPROT ID:

P43235

Full Name:

cathepsin K

Calculated MW:

39 kDa

Observed MW:

29-36 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate
IHC 1:100-1:400
IF 1:50-1:500

Applications

Tested Applications:

IP, IF/ICC, IF-P, IHC, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse, zebrafish

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:

IP: ROS1728 cells,

IHC: human breast cancer tissue, human lung cancer tissue, human osteosarcoma tissue

IF: mouse brain tissue, HepG2 cells

Background Information

CTSK (cathepsin K), also named CTSO, CTSO2, is a recently identified lysosomal cysteine proteinase. CTSK is synthesized as a proenzyme of 38 kDa and subsequently enters acidic lysosomal compartments, in which the propeptide is cleaved and transformed into an active enzyme and it may influence adipocyte differentiation through modifying extracellular matrix components (PMID:16912123). It is revealed both the 46-kDa cathepsin-K precursor and the 30-kDa mature form in mouse bone extracts (PMID:9811821). The high CTSK protein levels are only detected in primary cultured fibroblasts derived from normal and neoplastic breast tissue, where the 37- and 25-kDa bands to be detected correspond to pro- and mature proteins through western blot (PMID:18765527). The full length protein has a signal peptides with 15 amino acids and a propeptide with 99 amino acids. CTSK may have cross reaction with the other members of cathepsin family and form a complex of 70 kDa with an unidentified subunit (PMID:1930136).

Notable Publications

Author	Pubmed ID	Journal	Application
Jada M Selma	34547771	Blood Adv	
Shuo Ni	32871020	Cell Prolif	
Mobai Li	36243012	Dev Cell	IF

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

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

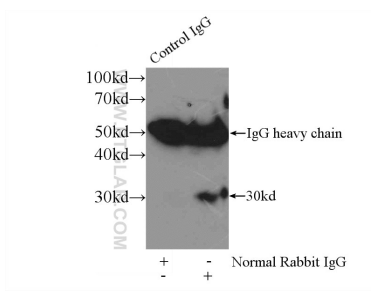
T: 4006900926

E: Proteintech-CN@ptglab.com

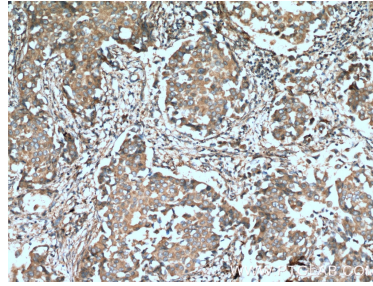
W: ptgcn.com

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

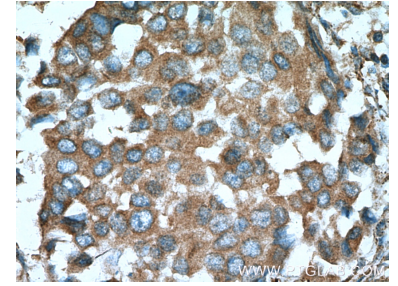
Selected Validation Data



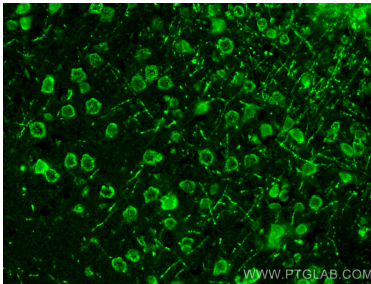
IP result of anti-Cathepsin K (IP:11239-1-AP, 3 μ g; Detection:11239-1-AP 1:500) with ROS1728 cells lysate 3200 μ g.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 11239-1-AP (Cathepsin K antibody at dilution of 1:200) (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 11239-1-AP (Cathepsin K antibody at dilution of 1:200) (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using Cathepsin K antibody (11239-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).