

Cathepsin K Polyclonal Antibody

Catalog number: 11239-1-AP

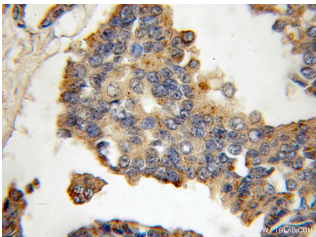
Size: 55 µg/150 µl

Source: Rabbit

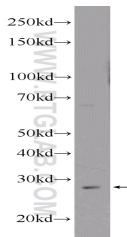
Isotype: IgG

Synonyms:

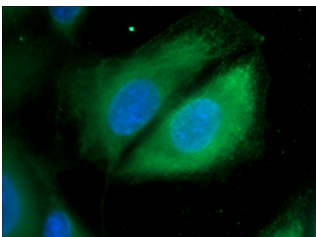
CTSK; Cathepsin K, Cathepsin O, Cathepsin O2, Cathepsin X, CTSO2, CTSK, CTSO, CTSO1, CTSO2, PKND, PYCD



Immunohistochemical of paraffin-embedded human breast cancer using 11239-1-AP (CTSK antibody) at dilution of 1:100 (under 10x lens)



ROS1728 cells were subjected to SDS PAGE followed by western blot with 11239-1-AP (CTSK Antibody) at dilution of 1:1000



Immunofluorescent analysis of ROS1728 cells using 11239-1-AP (CTSK Antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)

Background

CTSK (cathepsin K), also named as 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).

Applications

Tested applications:	ELISA, IHC, WB, IP, IF
Cited applications:	IHC, WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Human, mouse
Calculated Cathepsin K MW:	39 kDa
Observed Cathepsin K MW:	29-36 kDa
Positive WB detected in	ROS1728 cells, mouse uterus tissue
Positive IP detected in	ROS1728 cells
Positive IHC detected in	Human breast cancer tissue, human lung cancer tissue, human osteosarcoma tissue
Positive IF detected in	ROS1728 cells, HepG2 cells
Recommended dilution:	WB: 1:500-1:5000 IP: 1:200-1:2000 IHC: 1:20-1:200 IF: 1:20-1:200

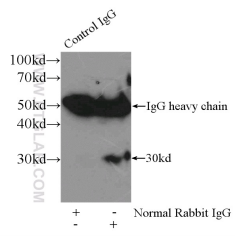
Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag1761
GenBank accession number:	BC016058
Gene ID (NCBI):	1513
Full name:	Cathepsin K

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.



IP Result of anti-CTSK
(IP:11239-1-AP, 3ug;
Detection:11239-1-AP 1:500)
with ROS1728 cells lysate
3200ug.