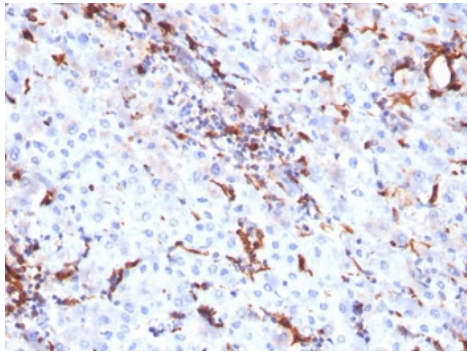


## Cathepsin K Antibody / CTSK [clone CTSK/2791] (V7477)

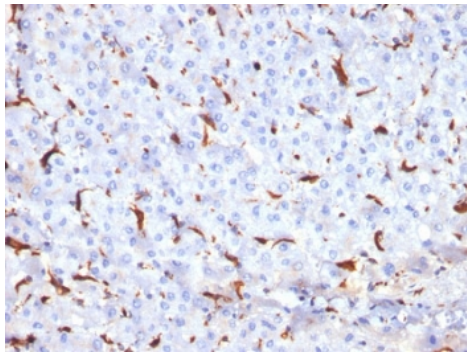
Catalog No.	Formulation	Size
V7477-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7477-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7477SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7477IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

[Bulk quote request](#)

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG1, kappa
<b>Clone Name</b>	CTSK/2791
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	P43235
<b>Localization</b>	Cytoplasmic
<b>Applications</b>	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Prediluted IHC only format : incubate for 30 min at RT (1)
<b>Limitations</b>	This Cathepsin K antibody is available for research use only.

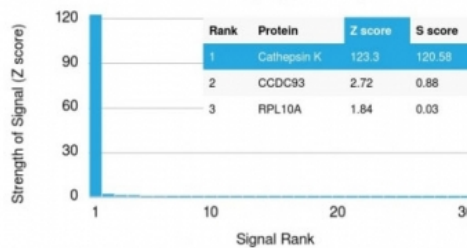


IHC testing of FFPE human liver tissue with Cathepsin K antibody (clone CTSK/2791).  
HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



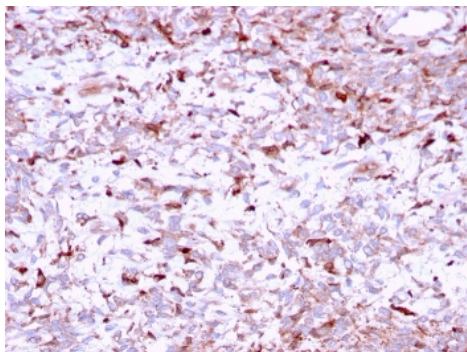
IHC testing of FFPE human liver tissue with Cathepsin K antibody (clone CTSK/2791).  
HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.

#### Human Protein Microarray Specificity Validation

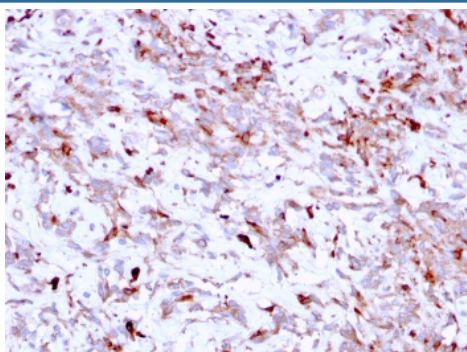


Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Cathepsin K antibody (clone CTSK/2791). These results demonstrate the foremost specificity of the CTSK/2791 mAb.

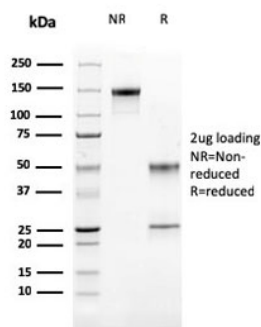
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



IHC testing of FFPE human liver tissue with Cathepsin K antibody (clone CTSK/2791).  
HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE human liver tissue with Cathepsin K antibody (clone CTSK/2791).  
HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



SDS-PAGE analysis of purified, BSA-free Cathepsin K antibody (clone CTSK/2791) as confirmation of integrity and purity.

## Description

The protein encoded by this gene is a lysosomal cysteine proteinase involved in bone remodeling and resorption. This protein, which is a member of the peptidase C1 protein family, is predominantly expressed in osteoclasts. However, the encoded protein is also expressed in a significant fraction of human breast cancers, where it could contribute to tumor invasiveness. Mutations in this gene are the cause of pycnodysostosis, an autosomal recessive disease characterized by osteosclerosis and short stature.

## Application Notes

Optimal dilution of the Cathepsin K antibody to be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## Immunogen

A portion of amino acids 163-274 from the human protein was used as the immunogen for the Cathepsin K antibody.

## Storage

Store the Cathepsin K antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).