#### Product datasheet

#### **Anti-Cathepsin K/CTSK Antibody**

Catalog Number: PB9856



BOSTER BIOLOGICAL TECHNOLOGY

Special NO.1, International Enterprise Center, 2nd Guanshan Road, Wuhan, China

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<b>Basic Inform</b>	nation	
<b>Product Name</b>	Anti-Cathepsin K/CTSK Antibody	
Gene Name	CTSK	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS ,0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	E. coli-derived human Cathepsin K recombinant protein (Position: A115-M329). Human Cathepsin K shares 86.9% and 88.8% amino acid (aa) sequence identity with mouse and rat Cathepsin K, respectively.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	45KD	
Dilution Ratios	Western blot(WB): Immunohistochemistry(Paraffin-embedded Section): (Boiling the paraffin sections in 10mM citrate buffer,pH6.1 mins is required for the staining of formalin/paraffin section must be determined by end user.	

# **Storage**

12 months from date of receipt,  $-20^{\circ}$ C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## **Background Information**

Cathepsin K, abbreviated CTSK, is an enzyme that in humans is encoded by the CTSK gene. It is mapped to 1q21. The protein encoded by this gene is a lysosomal Cysteine protease involved in bone remodeling and resorption. And this protein, which is a member of the peptidase C1 protein family, is expressed predominantly in osteoclasts. Additionally, the enzyme's ability to catabolize elastin, Collagen, and gelatin allow it to break down bone and cartilage. This catabolic activity is also partially responsible for the loss of lung elasticity and recoil inemphysema. Cathepsin K inhibitors, such as odanacatib, show great potential in the treatment of osteoporosis. Cathepsin K is degraded by Cathepsin S, called Controlled Cathepsin Cannibalism.

### Reference

Anti-Cathepsin K/CTSK Antibody被引用在1文献中。

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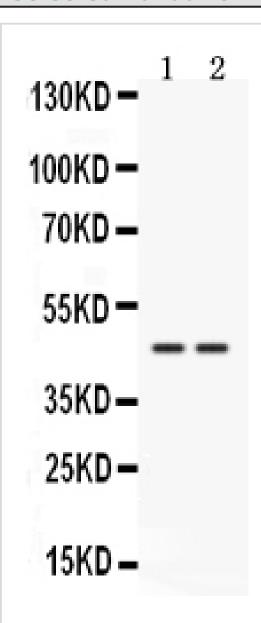


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# **Selected Validation Data**



Western blot analysis of Cathepsin K expression in HELA whole cell lysates (lane 1) and 22RV1 whole cell lysates (lane 2). Cathepsin K at 45KD was detected using rabbit anti- Cathepsin K Antigen Affinity purified polyclonal antibody (Catalog # PB9856) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1002).