bs-1611R **[Primary Antibody]**

Cathepsin K Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1513 **SWISS:** P43235

Target: Cathepsin K

Immunogen: KLH conjugated synthetic peptide derived from human Cathepsin K: 112-210/329.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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. This gene may be subject to RNA editing. [provided by RefSeq, Jul 2008].

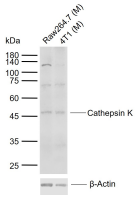
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Mouse, Rat (predicted: Human, Pig, Cow, Dog, GuineaPig, Horse)

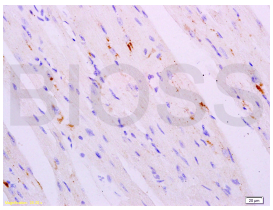
Predicted MW.: 36 kDa

Subcellular Location: Cytoplasm

VALIDATION IMAGES



Sample: Lane 1: Mouse Raw264.7 cell lysates Lane 2: Mouse 4T1 cell lysates Primary: Anti-Cathepsin K (bs-1611R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 36 kDa Observed band size: 46 kDa



Tissue/cell: mouse heart tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-Cathepsin K Polyclonal Antibody, Unconjugated(bs-1611R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

SELECTED CITATIONS

- **[IF=18]** Dong Wang. et al. Treatment of hemophilic arthropathy by immunomodulatory extracellular vesicle delivered by liposome hybrid nanoparticles. BIOACT MATER. 2024 Oct;40:47 IHC ;Mouse. 10.1016/j.bioactmat.2024.05.039
- **[IF=14.976]** Qinyu Ma. et al. Small extracellular vesicles deliver osteolytic effectors and mediate cancer‐induced osteolysis in bone metastatic niche. J Extracell Vesicles. 2021 Feb;10(4):e12068 WB ;Mouse. 33659051
- **[IF=14.3]** Yansi Xian. et al.Enhanced SIRT3 expression restores mitochondrial quality control mechanism to reverse osteogenic impairment in type 2 diabetes mellitus.BONE RESEARCH.2025 Mar 3;13(1):30. IF ;Mouse. 40025004

- **[IF=14.1]** Chuanrui Ma. et al. Wogonin Attenuates Atherosclerosis via KLF11-Mediated Suppression of PPARα-YAP1-Driven Glycolysis and Enhancement of ABCA1/G1-Mediated Cholesterol Efflux. ADV SCI. 2025 May;:2500610 IF ;Mouse. 40397286
- **[IF=7.088]** Xinyi Qi. et al. Briarane-type diterpenoids, the inhibitors of osteoclast formation by interrupting Keap1-Nrf2 interaction and activating Nrf2 pathway. EUR J MED CHEM. 2023 Jan;246:114948 WB ;Mouse. 36446206