bs-1615R **[Primary Antibody]**

Cathepsin D Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1509 **SWISS:** P07339

Target: Cathepsin D

Immunogen: KLH conjugated synthetic peptide derived from human Cathepsin D light chain: 101-200/412.

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: Cathepsin D is a normal lysosomal protease that is expressed in all cells. It is an aspartyl protease with a pH optimum in the range of 3-5, and contains two N-linked oligosaccharides. Cathepsin D is synthesized as an inactive 52 kDa pro enzyme. Activation involves the proteolytic removal of the 43 amino acid profragment and an internal cleavage to generate the two-chain form made up of 34 and 14 kDa subunits. Cathepsin D contains the mannose-6-phosphate lysosomal localization signal that targets the enzyme to the lysosomal compartment where it functions in the normal degradation of proteins. In certain tumor cells, Cathepsin D is abnormally processed and is secreted in its 52 kDa precursor form. Numerous clinical studies as well as in vitro evidence suggest that cathepsin D plays an important role in malignant transformation and may be a useful prognostic indicator for breast cancer and possibly Alzheimer's disease.

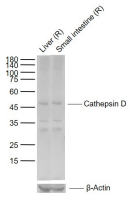
Applications: **WB** (1:500-2000)

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

Predicted MW.: 11/38/45 kDa

Subcellular Location: Secreted ,Cytoplasm

VALIDATION IMAGES



Sample: Lane 1: Rat Liver tissue lysates Lane 2: Rat Small intestine tissue lysates Primary: Anti-Cathepsin D (bs-1615R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 11/38/45 kDa Observed band size: 46 kDa

SELECTED CITATIONS

- **[IF=3.51]** Hossain, Shahdat, Hiroyuki Arai, and Osamu Shido. "Neuroprotective Effect of Madecassoside Evaluated Using Amyloid β1-42-Mediated in Vitro and in Vivo Alzheimer’ s Disease Models." International Journal of Indigenous Medicinal Plants (2014). ELISA ;="Rat". notpostedyet
- **[IF=2.74]** Bailey Balouch. et al. Human INCL fibroblasts display abnormal mitochondrial and lysosomal networks and heightened susceptibility to ROS-induced cell death. Plos One. 2021 Feb;16(2):e0239689 ICC ;Human. 33561134
- **[IF=1.71]** Liao, Peng, et al. "Organellar proteome analyses of ricin toxin-treated HeLa cells." Toxicology and industrial

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health (2014): 0748233714549066. WB ;="Human". 25227225

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