

**bs-23781R****[ Primary Antibody ]****Cathepsin D Rabbit pAb****Bioss**  
**ANTIBODIES**

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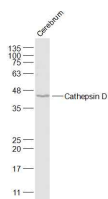
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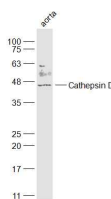
400-901-9800

**DATASHEET**

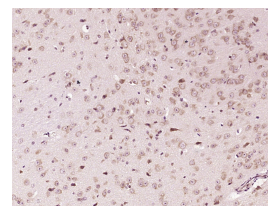
<b>Host:</b> Rabbit	<b>Isotype:</b> IgG	<b>Applications:</b> <b>WB</b> (1:500-2000)
<b>Clonality:</b> Polyclonal		<b>IHC-P</b> (1:100-500)
<b>GeneID:</b> 13033	<b>SWISS:</b> P18242	<b>IHC-F</b> (1:100-500)
<b>Target:</b> Cathepsin D		<b>IF</b> (1:100-500)
<b>Immunogen:</b> KLH conjugated synthetic peptide derived from mouse Cathepsin D heavy chain: 121-220/410.		<b>Reactivity:</b> Mouse (predicted: Rat)
<b>Purification:</b> affinity purified by Protein A		
<b>Concentration:</b> 1mg/ml		<b>Predicted MW.:</b> 45 kDa
<b>Storage:</b> 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.		<b>Subcellular Location:</b> Secreted ,Cytoplasm
<b>Background:</b> 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.		

**VALIDATION IMAGES**

Sample: Cerebrum (Mouse) Lysate at 40 ug  
 Primary: Anti-Cathepsin D (bs-23781R) at 1/1000  
 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 45 kD Observed band size: 45 kD



Sample: Aorta(Mouse) Lysate at 40 ug Primary: Anti-Cathepsin D (bs-23781R) at 1/1000 dilution  
 Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 45 kD Observed band size: 45 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cathepsin D) Polyclonal Antibody, Unconjugated (bs-23781R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

**SELECTED CITATIONS**

- **[IF=6]** Rui Niu. et al. Curcumin inhibits ferroptosis-mediated vascular occlusion by regulating the CXCL10/CXCR3 axis in retinopathy of prematurity.. MOLECULAR MEDICINE. 2025 Mar 24;31(1):113. IF ;. 40128669

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.