

# Anti-Cathepsin D Antibody

## IRS099RB



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	mIHC
<b>Molecular Wt:</b>	Predicted band size: 45/28 kDa

**Description:** Cathepsin D is a protein that in humans is encoded by the CTSD gene. This gene encodes a lysosomal aspartyl protease composed of a protein dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. Cathepsin D is an aspartic endo-protease that is ubiquitously distributed in lysosomes. The main function of cathepsin D is to degrade proteins and activate precursors of bioactive proteins in pre-lysosomal compartments. This proteinase, which is a member of the peptidase A1 family, has a specificity similar to but narrower than that of pepsin A. Transcription of the CTSD gene is initiated from several sites, including one that is a start site for an estrogen-regulated transcript. Mutations in this gene are involved in the pathogenesis of several diseases, including breast cancer and possibly Alzheimer disease. Homozygous deletion of the CTSD gene leads to early lethality in the postnatal phase. Deficiency of CTSD gene has been reported an underlying cause of neuronal ceroid lipofuscinosis (NCL).

**Immunogen:** Synthetic peptide within Human Cathepsin D aa 363-412 / 412.

**Positive control:** Human tonsil tissue.

**Subcellular location:** Extracellular space, Lysosome, Melanosome.

**Database links:** SwissProt: P07339 Human

**Recommended Dilutions:**  
mIHC 1:100

**Storage Buffer:** PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

**Purity:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders: 0086-571-88062880

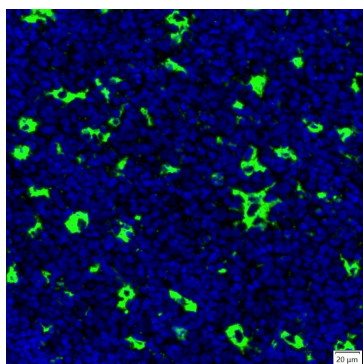
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Applications: WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

## Images



**Fig1:** mlHC analysis of human tonsil tissue (Formalin/PFA-fixed paraffin-embedded sections) with Rabbit anti-Cathepsin D antibody (IRS099RB) at 1/100 dilution. The immunostaining was performed with the IRISKitCmTSA Kit (900808). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95°C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

**Note:** All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

## Background References

1. Santaguida S et al. Aneuploidy-induced cellular stresses limit autophagic degradation. *Genes Dev* 29:2010-21 (2015).
2. Shen C et al. Global profiling of proteolytically modified proteins in human metastatic hepatocellular carcinoma cell lines reveals CAPN2 centered network. *Proteomics* 12:1917-27 (2012).

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