

Anti-Cathepsin B Antibody

R1407-1



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB
Molecular Wt:	Predicted band size: 38 kDa

Description: Cathepsin B belongs to a family of lysosomal cysteine proteases known as the cysteine cathepsins and plays an important role in intracellular proteolysis. In humans, cathepsin B is encoded by the CTSB gene. Cathepsin B is upregulated in certain cancers, in pre-malignant lesions, and in various other pathological conditions. Cathepsin B may enhance the activity of other proteases, including matrix metalloproteinase, urokinase (serine protease urokinase plasminogen activator), and cathepsin D, and thus it has an essential position for the proteolysis of extracellular matrix components, intercellular communication disruption, and reduced protease inhibitor expression. It is also involved in autophagy and catabolism, which is advantageous in tumor malignancy, and it is possibly involved in specific immune resistance. Additionally, it was recently determined to have minor ligase activity with the ability to attach peptide fragments via an amide bond.

Immunogen: Synthetic peptide within Human Cathepsin B C-terminal aa 290-339 339.

Positive control: SK-MEL-28 cell lysate.

Subcellular location: Secreted

Database links: SwissProt: P07858 Human

Recommended Dilutions:

WB 1:5,000

Storage Buffer: 1*PBS (pH7.4), 0.2% 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: Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

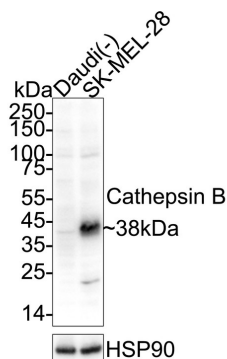
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Images

Fig1: Western blot analysis of Cathepsin B on different lysates with Rabbit anti-Cathepsin B antibody (R1407-1) at 1/5,000 dilution.

Lane 1: Daudi cell lysate (negative)

Lane 2: SK-MEL-28 cell lysate (negative)



Lysates/proteins at 20 µg/Lane.

Predicted band size: 38 kDa

Observed band size: 38 kDa

Exposure time: 10 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (R1407-1) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4 °C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

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

Background References

1. Tandon RK (January 2007). "Tropical pancreatitis". *J. Gastroenterol.* 42 (Suppl 17): 141–7.
2. Klein, D.M.; Felsentein, K.M.; Breneman, D.E. (2009). "Cathepsins B and L differentially regulate amyloid precursor protein processing". *J Pharmacol Exp Ther* 329 (3): 813–21.
3. Kindy, M.S.; Yu, J.; Zhu, H.; El-Amouri, S.S.; Hook, V.; Hook, G.R. (2012). "Deletion of the Cathepsin B Gene Improves Memory Deficits in a Transgenic Alzheimer's Disease Mouse Model Expressing AbetaPP Containing the Wild-Type beta-Secretase Site Sequence". *J Alzheimers Dis* 29 (4): 827–40.

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