

Rabbit Anti-Cathepsin B [MD41R]: RM0347, RM0347RTU7

Intended Use: For Research Use Only

Description: Cathepsin B (CSTB), part of the papain family of proteases, is a widely expressed lysosomal cysteine endopeptidase. Cathepsin B is produced from a larger precursor form, pro-cathepsin B, which runs at approximately 44 kDa on SDS-PAGE, and is proteolytically processed and glycosylated to form a mature two-chain protein containing a heavy chain (running at 27 and 24 kDa) and a light chain (5 kDa). High levels of cathepsin B are found in macrophages and osteoclasts, as well as various types of cancer cells, including lung, colon, prostate, breast, and stomach. In addition, expression of cathepsin B has been associated with multiple sclerosis, rheumatoid arthritis, and pancreatitis. While generally localized to lysosomes, in cancer alterations can lead to its secretion. Its role in tumor progression is thought to involve promotion of basement membrane degradation, invasion and metastasis. Expression can correlate with poor prognosis for a variety of forms of cancer.

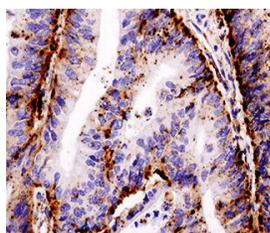
Specifications

Clone: MD41R
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human, mouse, rat
 Localization: lysosome, melanosome, can be secreted or associated with plasma membrane, cytoplasm, nucleus
 Formulation: Tissue culture supernatant in PBS pH7.5, containing 0.2% BSA, 15mM sodium azide (NaN3)
 Storage: Store at 2°- 8°C. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles
 Applications: IHC, Flow Cyt., ICC/IF, WB
 Package:

Description	Catalog No.	Size
Cathepsin B Concentrated	RM0347	1 ml
Cathepsin B Prediluted	RM0347RTU7	7 ml

IHC Procedure

Positive Control: HeLa cells, HT1080, A375, SW480 & A549 cell line lysates; colon carcinoma
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human colon carcinoma tissue stained with anti-Cathepsin B using DAB

References:

1. Analysis of heparanase isoforms and cathepsin B in the plasma of patients with gastrointestinal carcinomas: analytical cross-sectional study. Melo CM, et al. Sao Paulo Med J. Feb;133(1):28-35, 2015.
2. Cathepsin B: a potential prognostic marker for inflammatory breast cancer. Nouh MA, et al. J Transl Med. Jan 3;9:1, 2011.
3. Bone microenvironment modulates expression and activity of cathepsin B in prostate cancer. Podgorski I, et al. Neoplasia. Mar;7(3):207-23, 2005.