

Rabbit Anti-Cathepsin B Polyclonal: RC0285, RC0285RTU7

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.

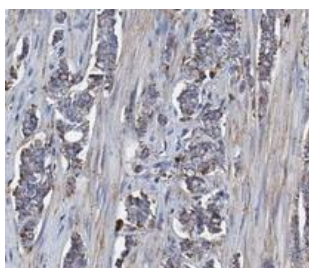
Specifications

Clone:	Polyclonal
Source:	Rabbit
Isotype:	IgG
Reactivity:	Human, rat
Immunogen:	GST-tagged recombinant fragment of rat cathepsin B aa322
Localization:	Lysosome, melanosome, secreted or associated with plasma membrane, cytoplasm, nucleus
Formulation:	Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Applications:	IHC, WB
Package:	

Description	Catalog No.	Size
Cathepsin B Concentrated	RC0285	1 ml
Cathepsin B Prediluted	RC0285RTU7	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:	Overnight @4°C
Detection:	Refer to the detection system manual
* Result should be confirmed by an established diagnostic procedure.	



FFPE human prostate 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.

Doc. 100-RC0285
Rev. A