

Rabbit Anti-Cathepsin D [EP81]: RM0017, RM0017RTU7

Intended Use: For Research Use Only

Description: Cathepsin D is a ubiquitously expressed lysosomal protease that is involved in proteolytic degradation, cell invasion, and apoptosis. It is suspected to play important roles in protein catabolism, antigen processing, degenerative diseases, and cancer progression. Cathepsin D is present in many types of cancer cells. In breast cancer, it is induced by estrogens and its expression is correlated with a higher risk of metastasis and poor disease-free survival. Extensive studies have been also performed to evaluate the clinical and therapeutic implication of Cathepsin D expression in nongynecological solid tumors. Although conflicting results have been observed in some reports, evidence emerging from these studies indicated that Cathepsin D seems to facilitate early stages of tumor progression such as cell proliferation and local dissemination.

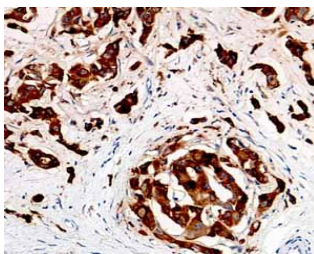
Specifications:

Clone: EP81
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Localization: Cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
Cathepsin D Concentrated	RM0017	1 ml
Cathepsin D Prediluted	RM0017RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Breast cancer
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH6.0, 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 breast cancer stained with anti-Cathepsin D using DAB

References:

1. Progranulin-mediated deficiency of cathepsin D results in FTD and NCL-like phenotypes in neurons derived from FTD patients. Valdez C, et al. Hum Mol Genet 26:4861-4872, 2017.
2. Lactation Is a Risk Factor of Postpartum Heart Failure in Mice with Cardiomyocyte-specific Apelin Receptor (APJ) Overexpression. Murata K, et al. J Biol Chem 291:11241-51, 2016.
3. A novel curcumin analog binds to and activates TFEB in vitro and in vivo independent of MTOR inhibition. Song JX, et al. Autophagy 12:1372-89, 2016.