

Basic Information

Product Name	Anti-Cathepsin D/CTSD Antibody (Clone#CEF-3)	
Gene Name	CTSD	
Source	Rabbit	
Clonality	Monoclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, IP, FCM	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
Immunogen	A synthesized peptide derived from human Cathepsin D	
Concentration	500 ug/ml	
Purification	Affinity-chromatography	
Observed MW	28 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-200
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-200
	ImmunoPrecipitation (IP):	1:50
	Flow Cytometry (FCM):	1:20

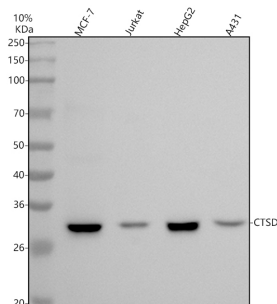
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Cathepsin D is a protein that in humans is encoded by the CTSD gene. This proteinase is a member of the peptidase C1 family, having a specificity similar to but narrower than that of pepsin A. It is mapped to 11p15.5. The cDNA encodes a 412-amino acid protein with 20 and 44 amino acids in a pre- and prosegment, respectively. Cathepsin D is one of the lysosomal proteinases. It is ubiquitously expressed and is involved in proteolytic degradation, cell invasion, and apoptosis. Mutations in this gene are involved in the pathogenesis of several diseases, including breast cancer and possibly Alzheimer disease and it has been considered as a breast cancer tumor marker.

Selected Validation Data



Western blot analysis of anti-Cathepsin D/CTSD antibody (BM4214). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human MCF-7 whole cell lysates,

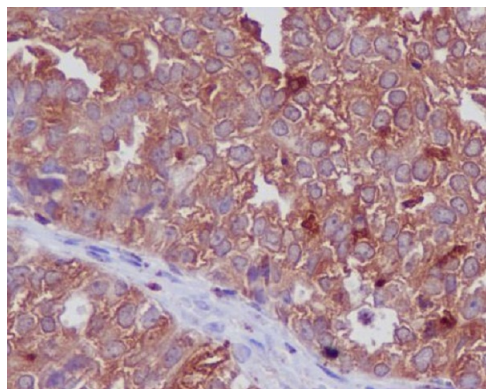
Lane 2: human Jurkat whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: human A431 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Cathepsin D/CTSD antigen affinity purified monoclonal antibody (BM4214) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Cathepsin D/CTSD at approximately 28 kDa. The expected band size for Cathepsin D/CTSD is at 45 kDa.



Immunohistochemical analysis of paraffin-embedded human ovarian cancer, using Cathepsin D Antibody.