Data Sheet (Cat.No.TMAY-03121)

Anti-Cathepsin D Antibody (5Z751)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Mouse
Conjugation:	Unconjugated
Clone:	5Z751
Purification:	Protein A

Applications

Verified Activity:	1. Mouse CTSD was immunoprecipitated using: -Lane A:0.5 mg MCF-7 Whole Cell Lysate. -Lane B:0.5 mg HepG2 Whole Cell Lysate -0.5 µL anti-Mouse CTSD rabbit monoclonal antibody and 15 µl of 50 % Protein G agarose. -Primary antibody: -Anti-Mouse CTSD rabbit monoclonal antibody, at 1:500 dilution. -Secondary antibody: -Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution. -Developed using the odyssey technique. -Performed under reducing conditions. -Predicted band size: 45 kDa. -Observed band size: 45 kDa. 2. Anti-CTSD rabbit monoclonal antibody at 1:500 dilution. -Lane A: MCF7 Whole Cell lysate. -Lysates/proteins at 30 µg per lane. -Secondary -Goat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution. -Developed using the Odyssey technique. -Performed under reducing conditions. -Predicted band size:45 kDa. -Observed band size:45 kDa(We are unsure as to the identity of these extra bands.)
Application:	ELISA,IP,WB
Recommended	WB: 1:500-1:1000; ELISA: 1:25000-1:50000; IP: 1-2 µL/mg of lysate

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen: Recombinant Protein: Mouse Cathepsin D / CTSD Protein (TMPY-00733)

Antigen Species: Mouse

Synonyms: CPSD;HEL-S-130P;cathepsin D;CLN10

Research Background

Cathepsin D (CTSD), a well known lysosomal aspartyl protease and belongs to the peptidase C1 family, which is a normal and major component of lysosomes, and is found in almost all cells and tissues of mammals. Its mostly described function is intracellular catabolism in lysosomal compartments, other physiological effect include hormone and antigen processing. Cathepsin D has a specificity similar to but narrower than that of pepsin A. Cathepsin D plays an important role in the degradation of proteins, the generation of bioactive proteins, antigen processing, etc. Among different role in cell physiology, a new function of this enzyme is examined. Cathepsin D is an important regulator of apoptotic pathways in cells. It acts at different stage of intrinsic and extrinsic pathway of apoptosis. In addition, CTSD secreted from human prostate carcinoma cells are responsible for the generation of angiostatin, a potent endogenous inhibitor of angiogenesis, suggesting its contribution to the prevention of tumor growth and angiogenesis-dependent growth of metastases.