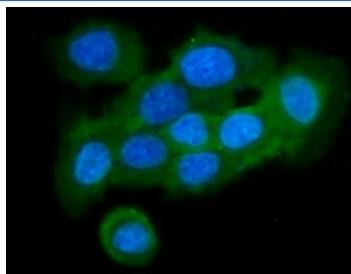


Cystatin B Antibody / CSTB (R31878)

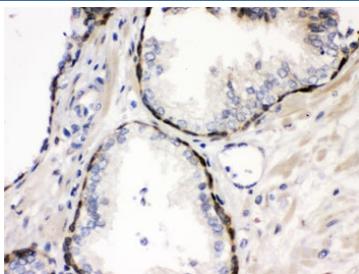
Catalog No.	Formulation	Size
R31878	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

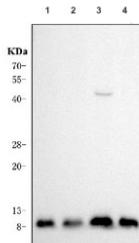
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P04080
Applications	Western Blot : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml ELISA : 0.1-0.5ug/ml (human protein tested); request BSA-free format for coating Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This Cystatin B antibody is available for research use only.



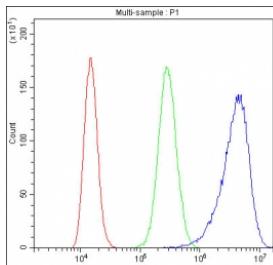
Immunofluorescent staining of FFPE human A431 cells with Cystatin B antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



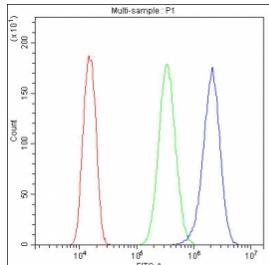
IHC testing of FFPE human prostate cancer with Cystatin B antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



Western blot testing of human 1) HeLa, 2) A431, 3) A549 and 4) HepG2 cell lysate with Cystatin B antibody. Predicted molecular weight ~11 kDa.



Flow cytometry testing of human A431 cells with Cystatin B antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Cystatin B antibody.



Flow cytometry testing of human U-2 OS cells with Cystatin B antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Cystatin B antibody.

Description

Cystatin B (CSTB), also called STFB, is a small protein that is a member of the superfamily of cysteine protease inhibitors. It has been isolated from human spleen and liver and its amino acid sequence has been fully determined. The cystatin B gene is located on 21q22.3. It is widely distributed and is localized mostly intracellularly, but has been found extracellularly. The protein is able to form a dimer stabilized by noncovalent forces, inhibiting papain and cathepsins I, h and b. Its role is thought to be as a protector against the proteinases leaking from lysosomes. A cystatin B multiprotein complex might have a specific cerebellar function, and that the loss of this function might contribute to the etiopathogenesis of EPM1. Upon differentiation to myotubes, CSTB becomes excluded from the nucleus and lysosomes, suggesting that the subcellular distribution of CSTB is dependent on the differentiation status of the cell.

Application Notes

Optimal dilution of the Cystatin B antibody should be determined by the researcher.

Immunogen

Amino acids 1-98 of human CSTB were used as the immunogen for the Cystatin B antibody.

Storage

After reconstitution, the Cystatin B antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.