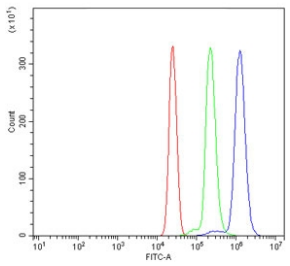
CTSC Antibody / Cathepsin C (RQ7224)

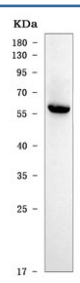
Catalog No.	Formulation	Size
RQ7224	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P53634
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This CTSC antibody is available for research use only.



Flow cytometry testing of human U937 cells with CTSC antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CTSC antibody.



Western blot testing of human A549 cell lysate with CTSC antibody. Expected molecular weight ~55 kDa proenzyme form; the proenzyme form is processed into ~25 kDa and 8 kDa chains.

Description

Cathepsin C (CTSC) also known as dipeptidyl peptidase I (DPP-I) is a lysosomal exo-cysteine protease belonging to the peptidase C1 protein family, a subgroup of the cysteine cathepsins. In humans, it is encoded by the CTSC gene. This gene encodes a member of the peptidase C1 family and lysosomal cysteine proteinase that appears to be a central coordinator for activation of many serine proteinases in cells of the immune system. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate heavy and light chains that form a disulfide-linked dimer. A portion of the propeptide acts as an intramolecular chaperone for the folding and stabilization of the mature enzyme. This enzyme requires chloride ions for activity and can degrade glucagon. Defects in the encoded protein have been shown to be a cause of Papillon-Lefevre syndrome, an autosomal recessive disorder characterized by palmoplantar keratosis and periodontitis.

Application Notes

Optimal dilution of the CTSC antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids V22-L463) was used as the immunogen for the CTSC antibody.

Storage

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