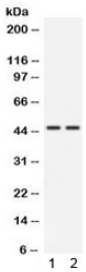
CTSK Antibody / Cathepsin K (R32101)

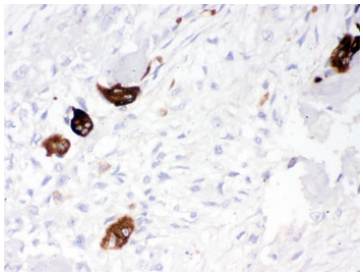
Catalog No.	Formulation	Size
R32101	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P43235
Applications	Western Blot : 0.1-0.5ug/ml IHC (FFPE) : 0.5-1ug/ml
Limitations	This CTSK antibody is available for research use only.



Western blot testing of human 1) HeLa and 2) 22RV1 cell lysate with CTSK antibody. Predicted molecular weight ~37 kDa, with an ~46 kDa pro form and an ~27 kDa mature form.



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

Description

Cathepsin K, abbreviated CTSK, is an enzyme that in humans is encoded by the CTSK gene. It is mapped to 1q21. The protein encoded by this gene is a lysosomal cysteine protease involved in bone remodeling and resorption. And this protein, which is a member of the peptidase C1 protein family, is expressed predominantly in osteoclasts. Additionally, the enzyme's ability to catabolize elastin, collagen, and gelatin allow it to break down bone and cartilage. This catabolic activity is also partially responsible for the loss of lung elasticity and recoil inemphysema. Cathepsin K inhibitors, such as odanacatib, show great potential in the treatment of osteoporosis. Cathepsin K is degraded by Cathepsin S, called Controlled Cathepsin Cannibalism.

Application Notes

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

Immunogen

Amino acids 115-329 of human Cathepsin K were used as the immunogen for the CTSK antibody.

Storage

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