

# Cathepsin K (human), (recombinant)

Highly active cysteine protease

Cathepsin K, a member of the papain family of cysteine proteases, acts upon proteins such as collagen, AL amyloid, kinin, and elastin. It is a lysosomal protease expressed primarily in osteoclasts, but also in other cell types such as macrophages. It functions in bone remodeling and is implicated in disease states such as osteoporosis, atherosclerosis, arthritis, and pycnodysostosis.

Citations: 15

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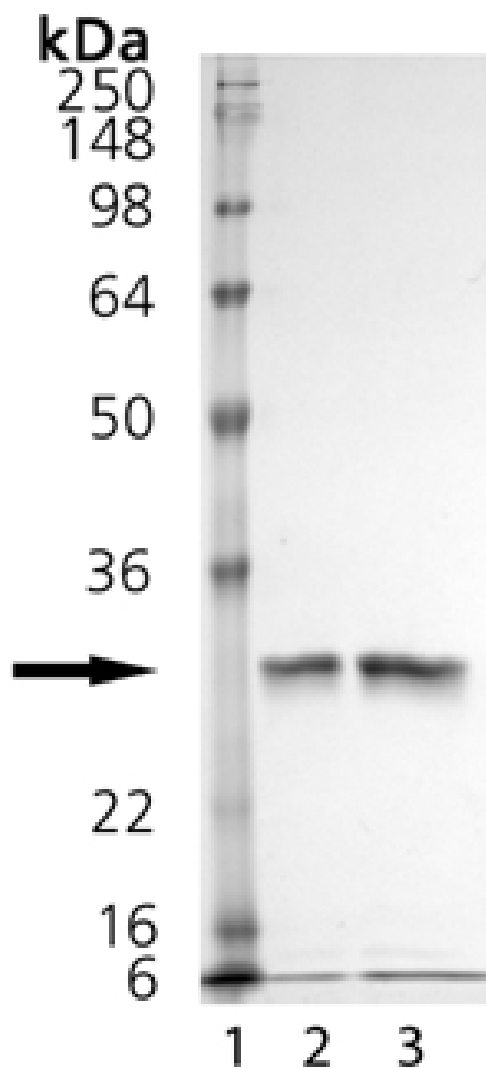
## Ordering Information

[Order Online »](#)

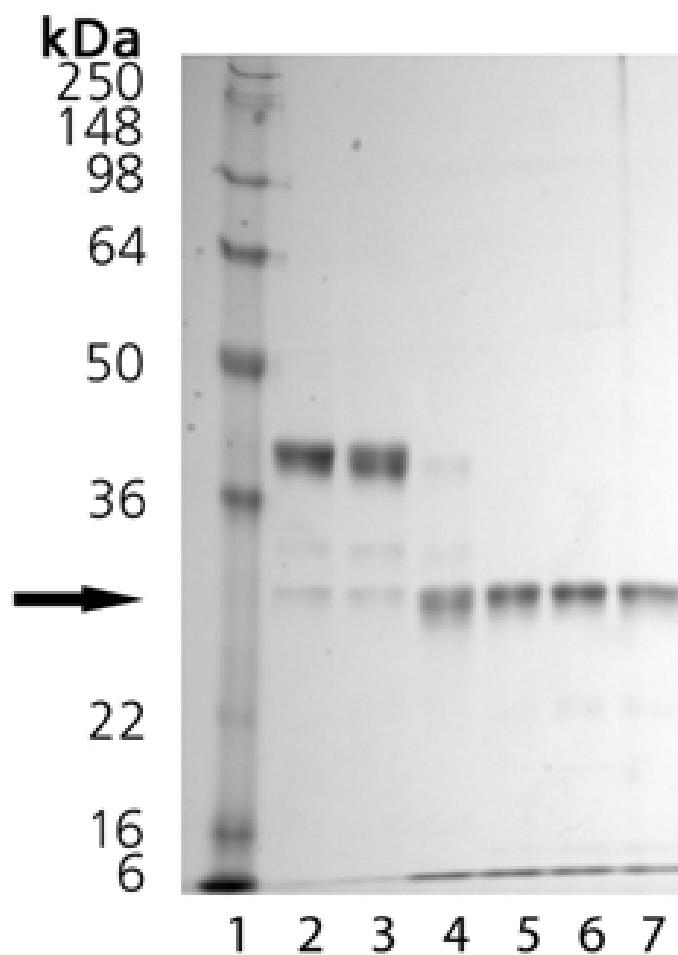
BML-SE553-0010	10µg
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## Manuals, SDS & CofA

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SDS-PAGE Analysis. Lane 1: MW Marker, Lane 2: 1 µg, Lane 3: 2 µg Cathepsin K



Activation of ProCathepsin K. Lanes 2-7 each contain 1 µg of total protein during time-course activation at low pH. Lane 2: pre-activation, Lane 3: 0 min, Lane 4: 1 hr, Lane 5: 2 hr, Lane 6: 3 hr, Lane 7: 4 hr.

## Handling & Storage

Use/Stability	Stable for at least 6 months after receipt when stored at -80°C.
Handling	Keep on dry ice. Avoid freeze/thaw cycles. After opening, prepare aliquots and store at -80°C.
Long Term Storage	-80°C
Shipping	Dry Ice

## Regulatory Status

RUO - Research Use Only

## Product Details

Alternative Name	Cathepsin O, Cathepsin O2
Formulation	Liquid. In 50mM sodium acetate, pH 5.5, containing 50mM sodium chloride, 0.5mM EDTA and 5mM DTT.
MW	~26kDa
Purity	≥95% (SDS-PAGE)
Source	Produced in insect cells. Purified as full-length proenzyme (see Prod. No. BML-SE367), then auto-activated at low pH. Produced in a baculovirus expression system.
Specific Activity	≥1.5 U/mg. One unit hydrolyzes 1μmol Z-Phe-Arg-AMC substrate (OMNICATHEPSIN® Fluorogenic Substrate, Prod. No. BML-P139) per min. at 37°C.
UniProt ID	P43235

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