## 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: 14

View Online »

**Ordering Information** 

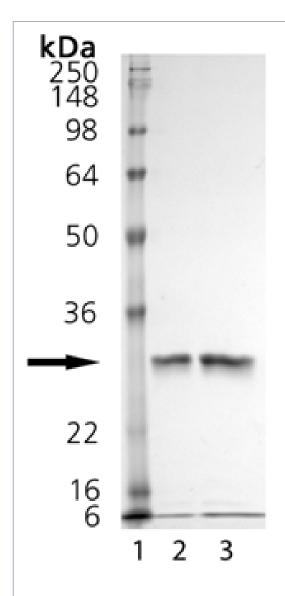
**Order Online** »

BML-SE553-0010

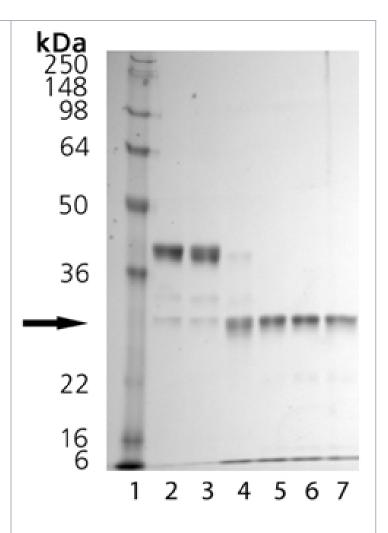
10µg

Manuals, SDS & CofA

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SDS-PAGE Analysis. Lane 1: MW Marker, Lane 2: 1  $\mu g$ , Lane 3: 2  $\mu g$  Cathepsin K



Activation of ProCathepsin K. Lanes 2-7 each contain 1  $\mu$ g 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<sup>®</sup>

Fluorogenic Substrate, Prod. No. BML-P139) per min. at 37°C.

UniProt ID P43235

