

Cathepsins

Cathepsins are proteases found in all animals as well as other organisms. There are approximately a dozen members in this family, distinguished by structure, catalytic mechanism, and their protein targets. The cysteine protease class comprises of cathepsins B, L, H, K, S, and O. The aspartyl protease class is composed of cathepsins D and E. Most of the members become activated at the low pH found in lysosomes. There are, however, exceptions such as cathepsin K, which works extracellularly after secretion by osteoclasts in bone resorption. Cathepsins have a vital role in mammalian cellular turnover, e.g. bone resorption. Cysteine cathepsins are highly upregulated in a wide variety of cancers. In addition, cathepsins are also implicated in numerous other diseases like Alzheimer's disease, stroke, arthritis, COPD, chronic periodontitis, pancreatitis, polycystic kidney disease and several ocular diseases including keratoconus, retinal detachment, AMD, glaucoma etc. BioVision is proud to offer numerous assay kits, active recombinant enzymes/proteins, antibodies, blocking peptides and inhibitors for research in these and additional areas related to cathepsins.

Assay Kits

Name	Cat. #
Cathepsin B Activity Fluorometric Assay Kit	K140-100
Cathepsin K Activity Fluorometric Assay Kit	K141-100
Cathepsin L Activity Fluorometric Assay Kit	K142-100
Cathepsin D Activity Fluorometric Assay Kit	K143-100
Cathepsin S Activity Fluorometric Assay Kit	K144-100
Cathepsin H Activity Fluorometric Assay Kit	K145-100
Cathepsin G Activity Fluorometric Assay Kit	K146-100
Cathepsin B (CTSB) Inhibitor Screening Kit (Fluorometric)	K147-100
Cathepsin D Inhibitor Screening Kit (Fluorometric)	K148-100
Cathepsin S Inhibitor Screening Kit (Fluorometric)	K149-100
Cathepsin K Inhibitor Screening Kit (Fluorometric)	K150-100

Enzymes

Name	Cat. #
Cathepsin B (active, human)	1021-5
Cathepsin D (active, human)	1022-5
Cathepsin H (active, human)	1023-5
Cathepsin L, human recombinant	1135-5, -100, -1000
Human CellExp™ Cathepsin S, human recombinant	7277-10, -50, 1000
Procathepsin K, human recombinant	1026-10, -50, -1000
Procathepsin K, mouse recombinant	1027-10, -50, -1000
Procathepsin K, rat recombinant	1029-10, -50, -1000
Cathepsin K, Active, human recombinant	7600-5, -50
Cathepsin K, Active, mouse recombinant	7597-5, -50
Cathepsin K, Active, rat recombinant	7598-5, -50

Antibodies/Blocking Peptides

Name	Cat. #
Cathepsin B Antibody	3190-100
Cathepsin B Blocking Peptide	3190BP-50
Cathepsin F Antibody	3371-100
Cathepsin F Blocking Peptide	3371BP-50
Cathepsin G Antibody	3370-100
Cathepsin H Antibody	3367-100
Cathepsin K Antibody	3368-100
Cathepsin K Blocking Peptide	3368BP-50
Cathepsin K Antibody	3588-100
Cathepsin K Blocking Peptide	3588BP-50
Cathepsin L Antibody	3192-100
Cathepsin L Blocking Peptide	3192BP-50
Cathepsin L (Cleaved) Antibody	3741-100
Cathepsin L (Cleaved) Blocking Peptide	3741BP-50
Cathepsin S Antibody	3366-100
Cathepsin S Antibody	3366R-100
Cathepsin S Blocking Peptide	3366RBP-50
Cathepsin V Antibody	3712-100
Cathepsin V Antibody (Clone BV55-1)	3411-100
Cathepsin V Blocking Peptide	3712BP-50
Cathepsin W Antibody (Clone BV39-2B)	3412-100

Inhibitors

Name	Cat. #
Cathepsin B&L Inhibitor Z-Phe-Phe-FMK	1126-20C
Cathepsin G Inhibitor	1982-1
Z-FA-FMK	1986-1, 5