# Cathepsin V, His-Tag Recombinant

Catalog: 80009
Lot: 220510

## Product Information

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|---|---|
| **Description:** | Recombinant human cathepsin V, encompassing amino acids 18-334(end). This construct has a C-terminal His-tag (10xHis). This protein was affinity purified. |
| **Background:** | Cathepsin V, also called Cathepsin L2, is a lysosomal cysteine endopeptidase with high sequence homology to cathepsin L and other members of the papain superfamily of cysteine proteinases. Its expression is regulated in a tissue-specific manner and is high in thymus, heart, brain, testis, and cornea. It is involved in maturation of MHC class II molecules, turnover of elastin and breakdown of intra and extra-cellular substrates. Expression analysis of cathepsin V in human tumors revealed widespread expression in colorectal and breast carcinomas, suggesting a possible role in tumor processes. It has also been linked to atherosclerosis, hypertension, and aortic aneurysm, amongst other vascular-related pathologies. Further studies into its functions will allow us to understand in depth the potential benefits of targeting Cathepsin V for therapeutic purposes. |
| **Species:** | Human |
| **Construct:** | Cathepsin V (18-334(end)-His) |
| **Concentration:** | 0.35 mg/ml |
| **Expression System:** | HEK293 |
| **Purity:** | 80% |
| **Format:** | Aqueous buffer solution. |
| **Formulated In:** | 40 mM MES, pH 5.0, 120 mM NaCl, and 20% glycerol |
| **MW:** | 37 kDa + glycans |
| **Glycosylation:** | This protein runs at a higher MW by SDS-PAGE due to glycosylation. |
| **Genbank Accession:** | NM_001333.4 |
| **Stability:** | At least 6 months at -80°C. |
| **Storage:** | -80°C |
| **Instructions for Use:** | Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles. |
| **Specific Activity:** | 250 pmol/min/µg |
| **Assay Conditions:** | Assay was done according to Cathepsin V Inhibitor Screening Assay Kit (BPS Bioscience #79589) with various amounts of Cathepsin V, His-Tag Recombinant. |
| **Applications:** | Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling. |

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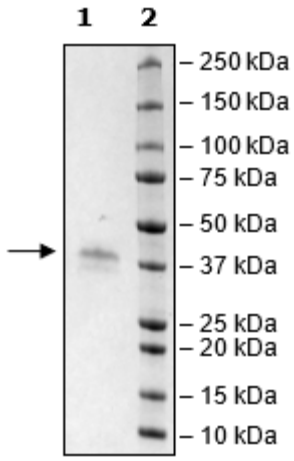
## Quality Control Data

4-20% SDS-PAGE Coomassie Staining




Cathepsin V Activity