

# Canine Cathepsin C/DPPI Protein

Cat. No. DPP-DM101

## Description

<b>Source</b>	Recombinant Canine Cathepsin C/DPPI Protein is expressed from HEK293 with His tag at the C-terminus. It contains Asp25-Leu459.
<b>Accession</b>	A0A8I3S5V2
<b>Molecular Weight</b>	The protein has a predicted MW of 50.98 kDa. Due to glycosylation, the protein migrates to 55-65 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.1 EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

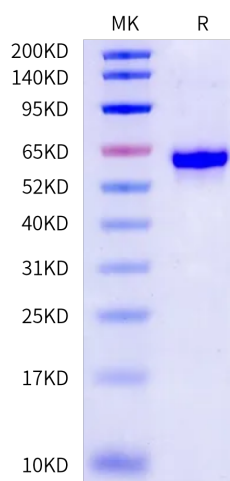
<b>Formulation</b>	Supplied as 0.22 $\mu\text{m}$ filtered solution in 50mM MES, 150mM NaCl, 20% glycerol (pH 6.0).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at $-80^{\circ}\text{C}$ . Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Cathepsin C (CTSC) is a lysosomal cysteine protease constitutively expressed at high levels in the lung, kidney, liver, and spleen. It plays a key role in the activation of serine proteases in cytotoxic T cells, natural killer cells (granzymes A and B), mast cells (chymase and tryptase) and neutrophils (cathepsin G, neutrophil elastase, proteinase 3) underscoring its pivotal significance in immune and inflammatory defenses.

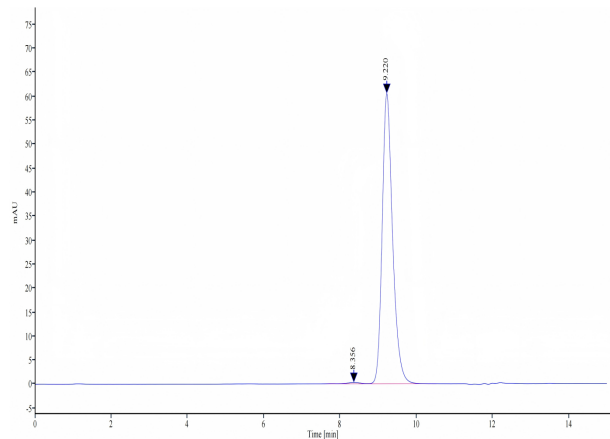
## Assay Data

### Bis-Tris PAGE



Canine Cathepsin C on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



The purity of Canine Cathepsin C is greater than 95% as determined by SEC-HPLC.

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#### Bioactivity Data

Measured by its ability to cleave the fluorogenic peptide substrate, Gly-Arg-7-amido-4-methylcoumarin (GR-AMC). The specific activity is >15000 pmol/min/μg.