

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Cathepsin C/DPPI in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human pro Cathepsin C/DPPI Asp25-Leu463 Accession # P53634
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### BACKGROUND

Cathepsin C, also known as dipeptidyl-peptidase I (DPPI), is a cysteine protease of the papain family (1). Cathepsin C sequentially removes dipeptides from the free N-termini of proteins and peptides. It has broad specificity except that it does not cleave a basic amino acid (Arg or Lys) in the N-terminal position or Pro on either side of the scissile bond. It requires halide ions for activity. The pro form contains a pro peptide and a catalytic region, which can be further processed into heavy/α and light/β chains that are linked by a disulfide bond. It is broadly distributed. Cathepsin C plays a role in the lysosomal degradation. It also functions as a key enzyme in the activation of granule serine proteases in cytotoxic T lymphocytes and natural killer cells (granzymes A and B), mast cells (tryptase and chymase), and neutrophils (Cathepsin G and elastase) by removing their N-terminal activation dipeptides (2). Loss of function mutations in the Cathepsin C gene result in periodontal disease and palmoplantar keratosis (3).

#### PRODUCT SPECIFIC NOTICES

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