Cathepsin D Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

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<td>H Mk</td>
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<td>46, 43, 28</td>
<td>Rabbit</td>
<td>#P07339</td>
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Product Usage Information

Application
Western Blotting

Dilution
1:1000

Storage
Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity
Cathepsin D Antibody detects endogenous levels of preprocathepsin D, procathepsin D and the heavy chain subunit of mature cathepsin D.

Source / Purification
Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues with the heavy chain subunit of human Cathepsin D. Antibodies are purified by protein A and peptide affinity chromatography.

Background
Cathepsin D is a ubiquitously expressed lysosomal aspartyl protease involved in the normal degradation of proteins (1). It is synthesized as an inactive 43 kDa preprocathepsin D that is cleaved and glycosylated to form a 46 kDa procathepsin D and then further cleaved to produce 28 kDa and 15 kDa subunits (heavy and light chains, respectively) (2). Cathepsin D may also be secreted into the cytosol during apoptosis and contribute to cleavage of substrates implicated in the apoptotic pathway (3). Numerous studies have suggested that cathepsin D plays a role in neuronal degradation and malignant transformation, particularly in breast cancer (4-9).

Background References

Species Reactivity
Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer
IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key
WB: Western Blotting

Cross-Reactivity Key

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