

## Caspase-12 Polyclonal Antibody

<b>CATALOG NO:</b>	3282-30T      30 µg (Trial size)
	3282-100      100 µg
<b>HOST:</b>	Rabbit
<b>IMMUNOGEN:</b>	Synthetic peptide corresponding to residues surrounding amino acid 310 of mouse caspase-12 (ID# BV-26).
<b>SPECIES REACTIVITY:</b>	Human, Mouse, Rat

**FORMULATION:**

0.2 mg/ml affinity purified rabbit anti-caspase-12 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

**BACKGROUND:**

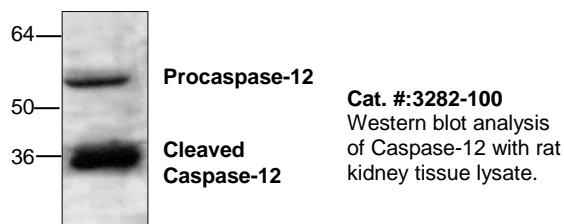
Three distinct signaling pathways lead to programmed cell death (apoptosis). The death receptor and mitochondrion pathways are the main two pathways, in which the key apoptotic proteases caspase-8 and caspase-9, respectively, are involved. The endoplasmic reticulum (ER) stress is the third apoptotic pathway and caspase-12 is involved. Caspase-12 is located to the ER, but not to the cytoplasm or mitochondrion. Caspase-12 is activated by ER stress, including disruption of ER calcium homeostasis, and mediates ER stress-induced apoptosis. Caspase-12 is localized to the ER with several proteins that are involved in Alzheimer's disease including  $\gamma$ -secretase presenilin and  $\beta$ -amyloid precursor protein (APP). Caspase-12 mediates cytotoxicity induced by amyloid- $\beta$ . Caspase-12 is ubiquitously expressed in mouse tissues.

**APPLICATION AND USAGE:**

The antibody can be used for Western blotting (0.5-4 µg/ml). It detects procaspase-12 (55 kDa) and cleavage caspase-12 (36 kDa) on SDS-PAGE immunoblots. However, the optimal conditions should be determined individually. Blocking peptide (Cat.# 3282BP-50) is available separately.

**STORAGE CONDITIONS:**

Store at -20°C. For long term storage, aliquot and freeze at -70°C. Avoid repeated freeze/thaw cycles.



**RELATED PRODUCTS:**

Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- $\beta$  -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

Growth Factors and Cytokines

Monoclonal and Polyclonal Antibodies

**FOR RESEARCH USE ONLY! Not to be used on humans.**