



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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**Caspase-12 (IN). Rabbit Polyclonal Antibody**

**BACKGROUND**

Three distinct signaling pathways lead to programmed cell death (apoptosis). The death receptor and mitochondrion pathways are the mains, 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 (1,2). Caspase-12 is localized to the ER but not to 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 co-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 (1).

**ORDERING INFORMATION**

**CATALOG NUMBER**

X1114P

**SIZE**

100  $\mu$ g

**FORM**

Unconjugated

**HOST/CLONE**

Rabbit

**FORMULATION**

Provided in phosphate buffered saline solution containing 0.02% sodium azide as a preservative

**CONCENTRATION**

See vial for concentration

**ISOTYPE**

IgG

**APPLICATIONS**

Western Blot

**SPECIES REACTIVITY**

Human, Mouse, Rat

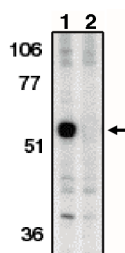
**ACCESSION NUMBER**

Human Q6UXS9

**IMMUNOGEN**

Synthetic peptide corresponding to amino acids 100 to 116 of the murine caspase-12

**Western blot analysis using anti-Caspase-12 (IN) antibody at 1  $\mu$ g/ml on mouse brain tissue in the absence (1) and presence (2) of blocking peptide.**



**POSITIVE CONTROL/TISSUE EXPRESSION**

Murine spleen tissue lysate

**COMMENTS**

Detects caspase-12 by Western blot at 0.5 to 1.0  $\mu\text{g/ml}$ . Optimal concentration should be evaluated by serial dilutions.

**PURIFICATION**

Antigen Immunoaffinity Purification

**SHIP CONDITIONS**

Ship at ambient temperature, freeze upon arrival

**STORAGE CUSTOMER**

Product should be stored at  $-20^{\circ}\text{C}$ . Aliquot to avoid freeze/thaw cycles

**STABILITY**

Products are stable for one year from purchase when stored properly

**REFERENCES**

1. Nakagawa, T., et al., Caspase-12 mediates endoplasmic-reticulum-specific apoptosis and cytotoxicity by amyloid-beta. *Nature* 2000, 403, 98-103.
2. Mehmet, H., Caspases find a new place to hide. *Nature* 2000, 403, 29-30
3. Van de Craen M, et al., Characterization of seven murine caspase family members. *FEBS Lett* 1997, 403, 61-9

**PRODUCT SPECIFIC REFERENCES**

1. Hetz, C., et al, 'Caspase-12 and endoplasmic reticulum stress mediate neurotoxicity of pathological prion protein' *EMBO Journal* 2003, 22, , 5435-54
2. Hetz, C., et al, 'The Disulfide Isomerase Grp58 Is a Protective Factor against Prion Neurotoxicity' *Journal of Neuroscience* 2005, 25, , 2793-2802
3. Rao, Rammohan V., et al, 'Coupling Endoplasmic Reticulum Stress to the Cell Death Program' *The Journal of Biological Chemistry* 2002, 277, 24, 21836-21842