

**SP2145P****Polyclonal Antibody to Caspase-4 (N-term) - Purified**

<b>Alternate names:</b>	CASP4, ICE(rel)-II, ICH2, Protease ICH-2, Protease TX
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	Caspase-4, a member of the Caspase-1 subfamily of cysteine proteases, exists as an inactive pro-enzyme which undergoes proteolytic cleavage of its p30 precursor form, into smaller p20 and p10 subunits. The cellular localisation of Caspase-4 on the Endoplasmic Reticulum (ER) membrane, has resulted in this protein becoming a focus of studies in which dysfunction or stress to the ER membrane is implicated, such as Alzheimers disease and Ischemia (1, 3) and confirms the involvement of Caspase-4 as an instigator of cellular apoptosis.
<b>Uniprot ID:</b>	<a href="#">P49662</a>
<b>NCBI:</b>	<a href="#">NP_001216.1</a>
<b>GeneID:</b>	<a href="#">837</a>
<b>Host / Isotype:</b>	Rabbit / IgG
<b>Immunogen:</b>	A 16 amino acid peptide from Human Caspase-4 amino terminus
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction <b>Purification:</b> Affinity Chromatography <b>Buffer System:</b> PBS <b>Preservatives:</b> 0.02% Sodium Azide
<b>Applications:</b>	<b>Western blot:</b> 1.0 µg/ml. <b>Immunohistochemistry on paraffin sections:</b> 2.0 µg/ml. This product <b>does not</b> require protein digestion pre-treatment of paraffin embedded sections e.g. trypsin or pronase prior to staining. This product <b>does not</b> require antigen retrieval using heat treatment prior to staining of paraffin sections. <i>Recommended Positive Control:</i> Spleen tissue. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody recognises an epitope within the N-terminal region (NT) of Caspase-4, otherwise known as ICH-2. This antibody detects a band of approximately 34 kDa in Ramos cell lysates (predicted precursor MWT 31 kDa). <b>Species:</b> Human, Mouse. Other species not tested.
<b>Storage:</b>	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	1. Hitomi J, Katayama T, Eguchi Y, Kudo T, Taniguchi M, Koyama Y, et al. Involvement of caspase-4 in endoplasmic reticulum stress-induced apoptosis and Abeta-induced cell death. J Cell Biol. 2004 May 10;165(3):347-56. Epub 2004 May 3. PubMed PMID:

15123740.

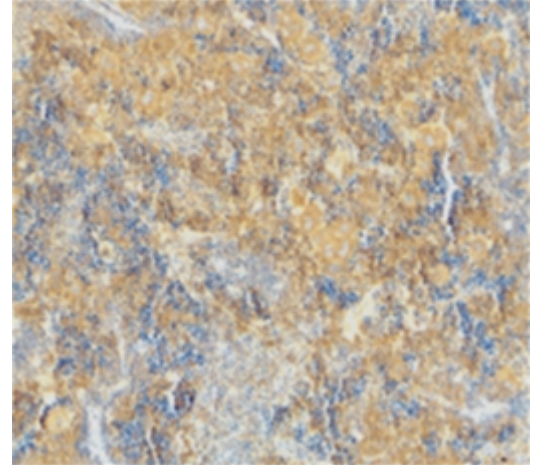
2. Kamens J, Paskind M, Hugunin M, Talanian RV, Allen H, Banach D, et al. Identification and characterization of ICH-2, a novel member of the interleukin-1 beta-converting enzyme family of cysteine proteases. *J Biol Chem.* 1995 Jun 23;270(25):15250-6. PubMed PMID: 7797510.

3. Katayama, T. et al. (2004) Induction of neuronal death by ER stress in Alzheimers disease. *J. Chem. Neuroanat.* 28(1-2): 67-78.

4. Cohen, G.M. (1997) Caspases: the executioners of apoptosis. *Biochem. J.* 326: 1-16.

**Pictures:**

Immunohistochemical staining of mouse spleen with Rabbit anti caspase-4 (SP2145P)



Western blot analysis of whole cell lysate from Ramos, human Burkitt's lymphoma derived, B-lymphoblastoid cells probed with Rabbit anti caspase-4 (SP2145P) at 0.5(A) and 1(B) µg/ml

