

Datasheet for ABIN5693194

anti-Caspase 4 antibody (AA 108-195)**2** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Caspase 4 (CASP4)
Binding Specificity:	AA 108-195
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Caspase 4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Purpose:	Anti-Caspase 4/Casp4 Antibody Picoband®
Immunogen:	E. coli-derived mouse Caspase 4 recombinant protein (Position: E108-T195).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-Caspase 4/Casp4 Antibody Picoband® (ABIN5693194). Tested in ELISA, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Target Details

Target:	Caspase 4 (CASP4)
Alternative Name:	Casp4 (CASP4 Products)
Background:	<p>Synonyms: Caspase-4, CASP-4</p> <p>Tissue Specificity: Widely expressed, including in thymus, lung and spleen (at protein level). Very low levels, if any, in the brain.</p> <p>Background: Caspase 4 is an enzyme that proteolytically cleaves other proteins at an aspartic acid residue, and belongs to a family of cysteine proteases called caspases. The Caspase 4 gene is mapped to a P1 clone containing the ICE gene, which is located at chromosome 11q22.2-q22.3. It contains 8 coding exons. The function of caspase 4 is not fully known, but it is believed to be an inflammatory caspase, along with caspase 1, caspase 5 (and the murine homolog caspase 11), with a role in the immune system.</p>
Molecular Weight:	43 kDa
Gene ID:	12363
UniProt:	P70343
Pathways:	Apoptosis , Caspase Cascade in Apoptosis , Positive Regulation of Endopeptidase Activity

Application Details

Application Notes:	<p>Western blot, 0.1-0.5 µg/mL</p> <p>Immunocytochemistry/Immunofluorescence, 5 µg/mL</p> <p>ELISA, 0.1-0.5 µg/mL</p> <p>1. Kajiwara, Y., Akram, A., Katsel, P., Haroutunian, V., Schmeidler, J., Beecham, G., Haines, J. L., Pericak-Vance, M. A., Buxbaum, J. D. FE65 binds teashirt, inhibiting expression of primate-specific caspase-4. PLoS One 4:e5071, 2009. 2. Kamens, J., Paskind, M., Hugunin, M., Talanian, R. V., Allen, H., Banach, D., Bump, N., Hackett, M., Johnston, C. G., Li, P., Mankovich, J. A., Terranova, M., Ghayur, T. Identification and characterization of ICH-2, a novel member of the interleukin-1-beta-converting enzyme family of cysteine proteases. J. Biol. Chem. 270: 15250-15256, 1995.</p>
Restrictions:	For Research Use only

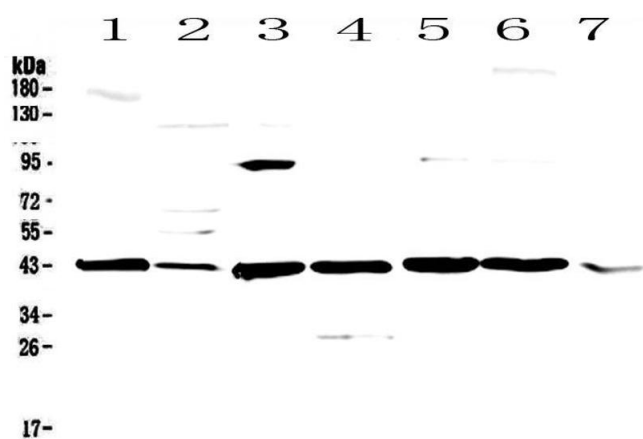
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Handling

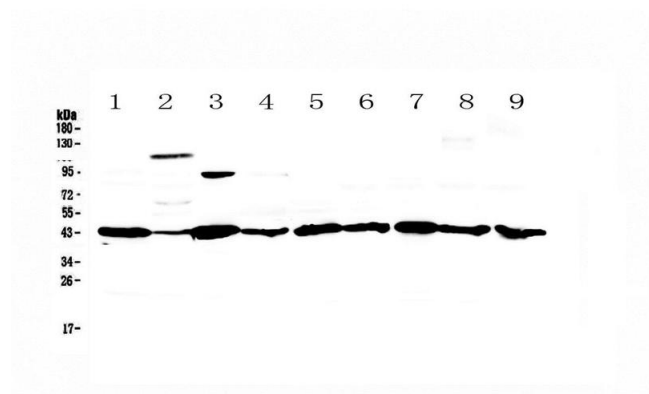
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , 0.05 mg NaN ₃ .
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Images



Western Blotting

Image 1. Western blot analysis of Caspase 4 using anti-Caspase 4 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse liver tissue lysates, Lane 2: mouse testis tissue lysates, Lane 3: mouse thymus tissue lysates, Lane 4: mouse lung tissue lysates, Lane 5: mouse HEPA1-6 whole cell lysates, Lane 6: mouse NIH3T3 whole cell lysates, Lane 7: mouse SP20 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Caspase 4 antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002)



with Tanon 5200 system. A specific band was detected for Caspase 4 at approximately 43KD. The expected band size for Caspase 4 is at 43KD.

Western Blotting

Image 2. Western blot analysis of Caspase 4 using anti-Caspase 4 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: rat testis tissue lysates, Lane 3: rat stomach tissue lysates, Lane 4: rat thymus tissue lysates, Lane 5: human COLO-320 whole cell lysates, Lane 6: human HepG2 whole cell lysates, Lane 7: human 22RV1 whole cell lysates, Lane 8: human PANC-1 whole cell lysates, Lane 9: human SGC-7901 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Caspase 4 antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Caspase 4 at approximately 43KD. The expected band size for Caspase 4 is at 43KD.