Datasheet for ABIN3044357

anti-Caspase 3 antibody (C-Term)

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Overview

Quantity:	100 µg
Target:	Caspase 3 (CASP3)
Binding Specificity:	AA 220-236, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Caspase 3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC)

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Caspase-3(CASP3) detection. Tested with WB, IHC-P, ICC in Human.
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human Caspase-3(P10)(220-236aa CAMLKQYADKLEFMHIL).
Sequence:	CAMLKQYADK LEFMHIL
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Caspase-3(CASP3) detection. Tested with WB, IHC-P, ICC in Human. Gene Name: caspase 3, apoptosis-related cysteine peptidase

Product Details

	Protein Name: Caspase-3(CASP-3)
Purification:	Immunogen affinity purified.

Target Details

Target:	Caspase 3 (CASP3)
Alternative Name:	CASP3 (CASP3 Products)
Background:	Caspase 3 is a caspase protein which interacts with Survivin, XIAP, CFLAR, Caspase 8, HCLS1, Deleted in Colorectal Cancer, TRAF3 and GroEL. This gene which is located at 4q35 encodes a protein that is a member of the cysteine-aspartic acid protease(caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes that undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein cleaves and activates caspases 6, 7, and 9, and the protein itself is processed by caspases 8, 9, and 10. It is the predominant caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimer's disease. And the caspase-3 activation in heart failure sequentially cleaves SRF and generates a truncated SRF that appears to function as a dominant-negative transcription factor. Additionally, the caspase-3 influence on bone mineral density should be considered in any in vivo application of caspase-3 inhibitors to the treatment of human disease. In erythroid precursors undergoing terminal differentiation, Hsp70 prevents active CASP3 from cleaving GATA1 and inducing apoptosis. Synonyms: A830040C14Rik antibody|Apopain antibody|Apopain precursor antibody|CASP 3 antibody|CASP-3 antibody|CASP3 antibody|Casp3a antibody|Caspase 3 antibody|Caspase 3 apoptosis related cysteine protease antibody|Caspase 3 p12 subunit antibody|Caspase 3, apoptosis-related cysteine peptidase antibody|Caspase 3, apoptosis-related cysteine protease antibody|Caspase 3, apoptosis-related cysteine protease a antibody|Caspase-3 subunit p12 antibody|Caspase3 antibody|CC3 antibody|CPP 32 antibody|CPP-32 antibody|CPP32 antibody|CPP32B antibody|Cysteine protease CPP32 antibody|EC 3.4.22.56 antibody|Human cysteine protease CPP32 isoform alpha mRNA complete cds antibody|ICE3 antibody|LICE antibody|mldy antibody|OTTHUMP00000165052 antibody|OTTHUMP00000165053 antibody|OTTHUMP00000165054 antibody|PARP cleavage protease antibody|Procaspase3 antibody|Protein Yama antibody|SCA 1 antibody|SCA-1 antibody|SCA1 antibody|SREBP cleavage activity 1 antibody|Yama antibody|Yama protein antibody
UniProt:	P42574

Target Details

Pathways:	Apoptosis, Caspase Cascade in Apoptosis, Sensory Perception of Sound, ER-Nucleus Signaling, Positive Regulation of Endopeptidase Activity, Activated T Cell Proliferation

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. ICC: Concentration: 0.5-1 µg/mL, Tested Species: Human Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P) and ICC.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Thimerosal, 0.05 mg Sodium azide.
Preservative:	Thimerosal (Merthiolate), Sodium azide
Precaution of Use:	This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Expiry Date:	12 months

Publications

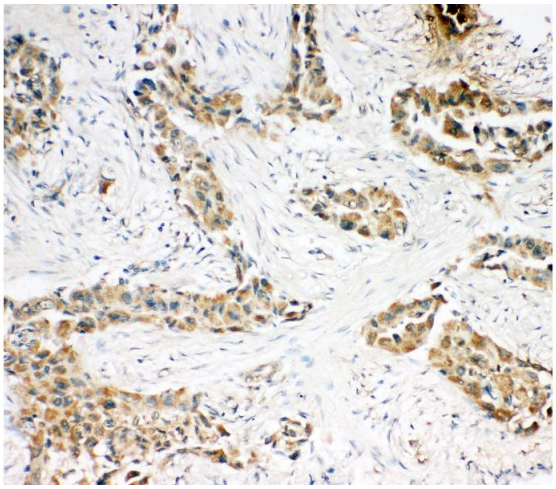
Product cited in:

Lang, Schulte, Goddard, Hedrick, Schulte, Wei, Schmiedt: "Transplantation of mouse embryonic stem cells into the cochlea of an auditory-neuropathy animal model: effects of timing after injury." in: **Journal of the Association for Research in Otolaryngology : JARO**, Vol. 9, Issue 2, pp. 225-40, (2008) (PubMed).

Lang, Ebihara, Schmiedt, Minamiguchi, Zhou, Smythe, Liu, Ogawa, Schulte: "Contribution of bone marrow hematopoietic stem cells to adult mouse inner ear: mesenchymal cells and fibrocytes." in: **The Journal of comparative neurology**, Vol. 496, Issue 2, pp. 187-201, (2006) (PubMed).

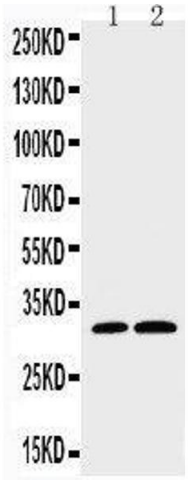
There are more publications referencing this product on: Product page

Images



Immunohistochemistry

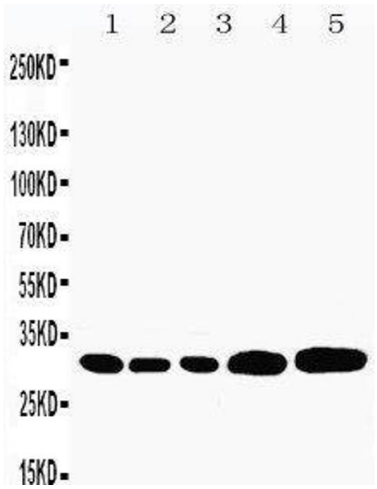
Image 1. Anti-Caspase-3(P10), IHC(P) IHC(P): Human Lung Cancer Tissue



Western Blotting

Image 2. Anti-Caspase-3(P10), Western blotting Lane 1: HELA Cell Lysate Lane 2: SMMC Cell Lysate

Images



Western Blotting

Image 3. Anti-Caspase-3(P10) antibody, Western blotting Lane 1: Rat Liver Tissue Lysate Lane 2: Rat Thymus Tissue Lysate Lane 3: Rat Spleen Tissue Lysate Lane 4: HEPA Cell Lysate Lane 5: NEURO Cell Lysate

Please check the product details page for more images. Overall 5 images are available for ABIN3044357.