

Product Datasheet

Caspase-3 Antibody (orb2636006)

Description	This MAb recognizes a protein of 32kDa, identified as Caspase 3. It is an aspartate-specific cysteine protease that belongs to the ICE subfamily of caspases. Caspase-3 is expressed in cells as an inactive precursor from which the p17 and p11 subunits of the mature caspase-3 are proteolytically generated during apoptosis. The caspase-3 precursor is first cleaved at Asp 175-Ser 176 to produce the p11 subunit and the p20 peptide. Subsequently, the p20 peptide is cleaved at Asp 28-Ser 29 to generate the mature p17 subunit. The active caspase-3 enzyme is a heterodimer composed of two p17 and two p11 subunits. At the onset of apoptosis, caspase-3 proteolytically cleaves PARP at a Asp 216-Gly 217 bond. During the execution of the apoptotic cascade, activated caspase-3 releases SREBP from the membrane of the ER in a proteolytic reaction that is distinct from their normal sterol-dependent activation. Caspase-3 cleaves and activates SREBPs between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Caspase-3 also cleaves and activates caspase-6, -7 and -9.
Species/Host	Mouse
Reactivity	Human
Conjugation	Unconjugated
Tested Applications	IHC-P
Immunogen	A recombinant fragment (within amino acids 1-200) of human CASP3 protein was used as the immunogen for the Caspase 3 antibody.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Note	For research use only
Application notes	Optimal dilution of the Caspase 3 antibody should be determined by the researcher.
Formula	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide

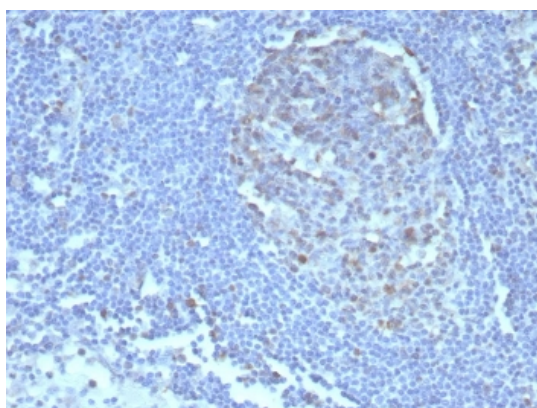
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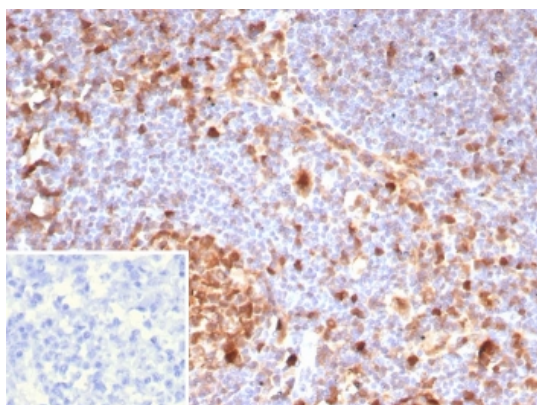
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Isotype	Mouse IgG2b, kappa
Clonality	Monoclonal
Clone Number	CASP3/8446
Antibody Type	Primary Antibody
Uniprot ID	P42574
Hazard Information	This Caspase 3 antibody is available for research use only.
Dilution Range	Immunohistochemistry (FFPE): 1-2ug/ml
Expiration Date	12 months from date of receipt.



IHC staining of FFPE human tonsil tissue with Caspase 3 antibody (clone CASP3/8446). HIER: boil tissue sections in pH9 10 mM Tris with 1 mM EDTA for 20 min and allow to cool before testing.



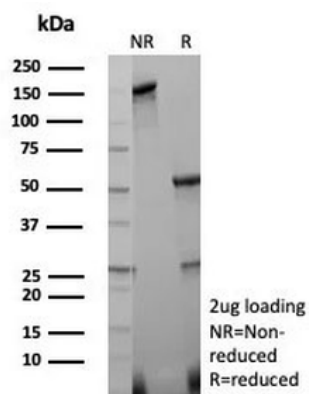
IHC staining of FFPE human lymph node tissue with Caspase 3 antibody (clone CASP3/8446). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH9 10 mM Tris with 1 mM EDTA for 20 min and allow to cool before testing.

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SDS-PAGE analysis of purified, BSA-free Caspase 3 antibody (clone CASP3/8446) as confirmation of integrity and purity.

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