

## Caspase 3 (Pro & Active Form) Antibody

Mouse Monoclonal Antibody [Clone CASP3/8446]

Catalog No	Format	Size
836-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
836-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
836-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

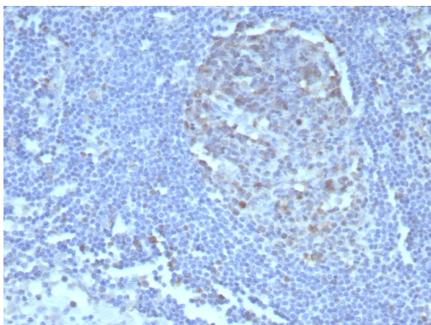
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

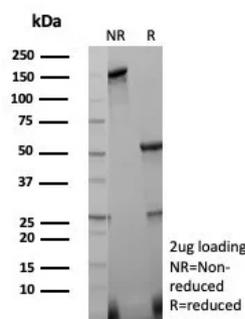
<b>Clone</b>	CASP3/8446
<b>Gene Name</b>	CASP3
<b>Immunogen</b>	Recombinant fragment (around aa1-200) of human CASP3 protein (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2b / Kappa
<b>Mol. Weight of Antigen</b>	32kDa
<b>Cellular Localization</b>	Cytoplasm.
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Heart HL60 or Jurkat cells. Human liver liver or kidney. spleen, Raji, Ramos.

\*Optimal dilution for a specific application should be determined.

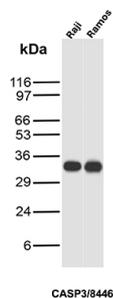
### Product Images for Caspase 3 (Pro & Active Form) Antibody



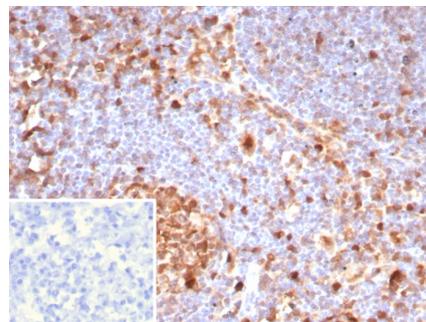
Formalin-fixed, paraffin-embedded human tonsil stained with Caspase 3 Mouse Monoclonal Antibody (CASP3/8446). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis of Purified Caspase 3 Mouse Monoclonal Antibody (CASP3/8446). Confirmation of Purity and Integrity of Antibody.



Western blot analysis of Raji and Ramos cell lysates using Caspase 3 Mouse Monoclonal Antibody (CASP3/8446).



Formalin-fixed, paraffin-embedded human lymph node stained with Caspase 3 Mouse Monoclonal Antibody (CASP3/8446). Inset: PBS instead of primary antibody; secondary only negative control.

### Specificity & Comments

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.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Apoptosis, Autophagy, Cardiovascular, Colon Cancer, Complement System, Cytokine Signaling, Immunology, Lung Cancer, MAPK Signaling, Mitochondria Marker, Signal Transduction