

# Datasheet for ABIN3030302

# anti-Caspase 3 antibody (AA 67-175)





#### Overview

Quantity:	100 μg
Target:	Caspase 3 (CASP3)
Binding Specificity:	AA 67-175
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Caspase 3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS)
Product Details	
Immunogen:	Human partial recombinant protein (AA 67-175) was used as the immunogen for this Caspase-3 antibody. This amino acid sequence is from the large subunit.
Isotype:	IgG
Purification:	Antigen affinity
Target Details	
Target:	Caspase 3 (CASP3)
Alternative Name:	Caspase-3 (CASP3 Products)
Background:	Caspase-3 is an enzyme which interacts with Survivin, XIAP, CFLAR, CASP8, HCLS1, Deleted in Colorectal Cancer, TRAF3 and GroEL. This gene which is located on 4q35 encodes a protein

that is a member of the cysteine-aspartic acid protease family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. They 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. CASP3 is the predominant cysteine-aspartic acid protease involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimers disease. And protein activation in heart failure sequentially cleaves SRF and generates a truncated SRF that appears to function as a dominant-negative transcription factor. Additionally, the proteins 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.

Gene ID:

836

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:

The stated application concentrations are suggested starting points. Titration of the Caspase-3 antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. Western blot:  $0.5-1 \,\mu\text{g/mL,IHC}$  (Paraffin):  $0.5-1 \,\mu\text{g/mL,FACS}$ :  $1-3 \,\mu\text{g/}10^6$  cells

Restrictions:

For Research Use only

#### Handling

Buffer:

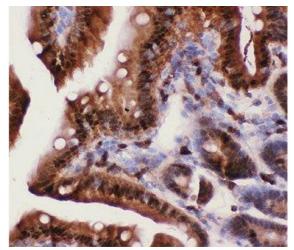
0.5 mg/mL if reconstituted with 0.2 mL sterile DI water

Storage:

-20 °C

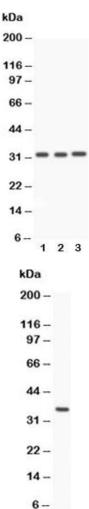
Storage Comment:

After reconstitution, the Caspase-3 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.



# **Immunohistochemistry**

**Image 1.** IHC-P: Caspase-3 antibody testing of mouse intestine tissue



#### **Western Blotting**

Image 2. Western blot testing of Caspase-3 antibody and Lane 1: rat liver; 2: rat thymus; 3: SMMC-7721

# **Western Blotting**

**Image 3.** Western blot testing of Caspase-3 antibody and recombinant human protein (0.5ng)

Please check the product details page for more images. Overall 9 images are available for ABIN3030302.