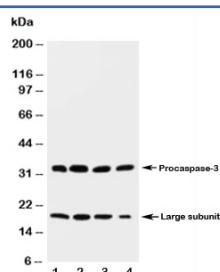


## Caspase-3 Antibody (R31065)

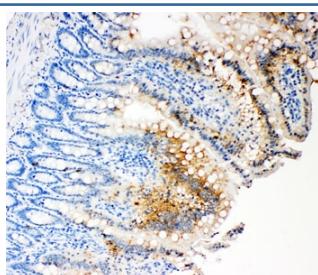
Catalog No.	Formulation	Size
R31065	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity
<b>Buffer</b>	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
<b>UniProt</b>	P70677
<b>Applications</b>	Western Blot : 0.5-1ug/ml IHC (FFPE) : 0.5-1ug/ml
<b>Limitations</b>	This Caspase-3 antibody is available for research use only.



Western blot testing of Caspase-3 antibody and rat tissue lysate: 1. heart; 2. liver; 3. thymus; 4. spleen



IHC-P: Caspase-3 antibody testing of rat intestine tissue lysate

## Description

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 Alzheimers 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.

## 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.

## Immunogen

An amino acid sequence from the N-terminus of mouse Caspase-3 (TDVDAANLRETFMGL) was used as the immunogen for this Caspase-3 antibody.

## Storage

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