

Caspase-3 (ANT0099R) Rabbit mAb

CatalogNo: ANT8058 **Recombinant R**

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA
Quantity : 100 ug/vial

Host Species

- Rabbit

MW

- 31.6kD (Calculated)
35kD (Observed)

Reactivity

- Human,Mouse,Rat,

Isotype

- IgG,Kappa

Applications

- WB,IHC,IF,IP,ELISA

Recommended Dilution Ratios

IHC 1:200-1000

WB 1:1000-5000

IF 1:200-1000

ELISA 1:5000-20000

IP 1:50-200

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality Monoclonal

Clone Number ANT0099R

Target Information

Endogenous

Gene name CASP3

Protein Name Caspase3

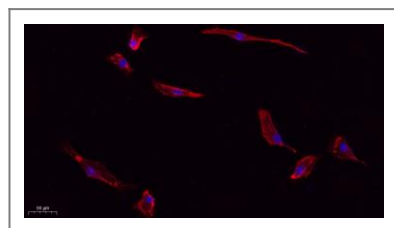
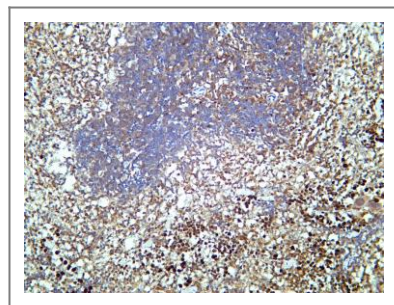
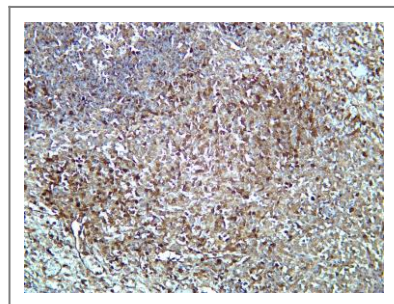
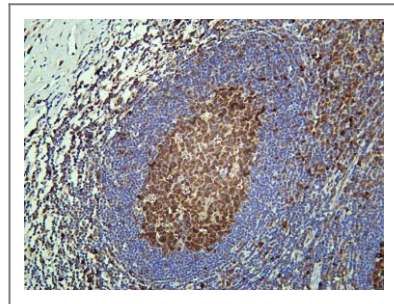
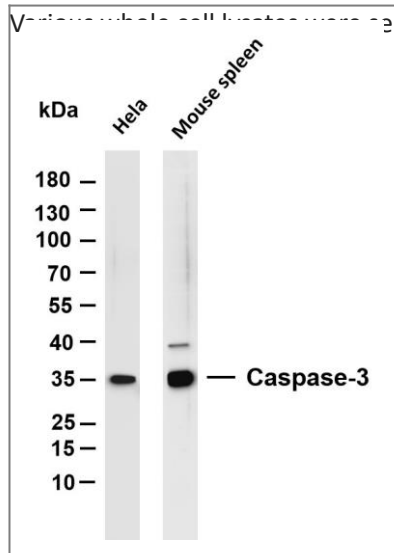
Organism	Gene ID	UniProt ID
Human	836 ;	P42574 ;
Mouse	12367 ;	P70677 ;
Rat	25402 ;	P55213 ;

Cellular Localization Cytoplasm

Tissue specificity Highly expressed in lung, spleen, heart, liver and kidney. Moderate levels in brain and skeletal muscle, and low in testis. Also found in many cell lines, highest expression in cells of the immune system.

Function Catalytic activity:Strict requirement for an Asp residue at positions P1 and P4. It has a preferred cleavage sequence of Asp-Xaa-Xaa-Asp-|- with a hydrophobic amino-acid residue at P2 and a hydrophilic amino-acid residue at P3, although Val or Ala are also accepted at this position.,enzyme regulation:Inhibited by isatin sulfonamides.,Function:Involved in the activation cascade of caspases responsible for apoptosis execution. At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-|Gly-217' bond. Cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Cleaves and activates caspase-6, -7 and -9. Involved in the cleavage of huntingtin.,ANTM: Cleavage by granzyme B, caspase-6, caspase-8 and caspase-10 generates the two active subunits. Additional processing of the propeptides is likely due to the autocatalytic activity of the activated protease. Active heterodimers between the small subunit of caspase-7 protease and the large subunit of caspase-3 also occur and vice versa.,PTM:S-nitrosylated on its catalytic site cysteine in unstimulated human cell lines and denitrosylated upon activation of the Fas apoptotic pathway, associated with an increase in intracellular caspase activity. Fas therefore activates caspase-3 not only by inducing the cleavage of the caspase zymogen to its active subunits, but also by stimulating the denitrosylation of its active site thiol.,similarity:Belongs to the peptidase C14A family.,subunit:Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a 17 kDa (p17) and a 12 kDa (p12) subunit.,tissue specificity:Highly expressed in lung, spleen, heart, liver and kidney. Moderate levels in brain and skeletal muscle, and low in testis. Also found in many cell lines, highest expression in cells of the immune system.,

Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Caspase-3



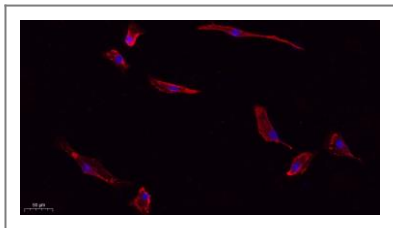
(ANT0099R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela
Lane 2: Mouse spleen Predicted band size: 35kDa
Observed band size: 35kDa

Human tonsil was stained with Anti-Caspase-3 (ANT0099R) rabbit antibody

Rat spleen was stained with Anti-Caspase-3 (ANT0099R) rabbit antibody

Mouse spleen was stained with Anti-Caspase-3 (ANT0099R) rabbit antibody

Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.

For Research use only, not for diagnostics and clinical use
Contact Antagene Inc Tel 1-866-964-2589 Email: info@antageneinc.com