

**Product Name:** KD-Validated Caspase 9 Recombinant Rabbit Monoclonal Antibody  
**Catalog #:** KVA01247

For research use only.

## Summary

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Rabbit                                                                      |
| <b>Application</b>  | WB,FCM,ICC                                                                  |
| <b>Reactivity</b>   | Human,M                                                                     |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Rabbit IgG                                                                  |
| <b>Clonality</b>    | Rabbit mAb                                                                  |
| <b>Form</b>         | Liquid                                                                      |
| <b>Storage</b>      | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>     | Ice bags                                                                    |
| <b>Buffer</b>       | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.   |
| <b>Purification</b> | Affinity purification                                                       |

## Application

|                         |                                                         |
|-------------------------|---------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:1,000-1:2,500; FC 1:200-1:2,000; ICC 1:100-1:1,000 |
| <b>Molecular Weight</b> | Calculated MW: 46.3kDa                                  |

## Antigen Information

|                          |                                                                                                                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | CASP9<br>CASP9; Caspase 9; Apoptosis-Related Cysteine Peptidase; Regulatory Subunit 56; Apoptotic Protease Mch-6; PPP1R56; APAF-3; Apoptotic Protease Activating Factor 3; ICE-LAP6;                                                     |
| <b>Alternative Names</b> | caspase-9; MCH6; Protein Phosphatase 1; Regulatory Subunit 56; ICE-Like Apoptotic Protease 6; CASP-9; APAF3; EC 3.4.22.62; Caspase 9; Apoptosis-Related Cysteine Protease; Apoptotic Protease-Activating Factor 3; Protein Phosphatase 1 |
| <b>Gene ID</b>           | 842.0                                                                                                                                                                                                                                    |
| <b>SwissProt ID</b>      | P55211                                                                                                                                                                                                                                   |
| <b>Immunogen</b>         | Recombinant protein of human Caspase-9                                                                                                                                                                                                   |

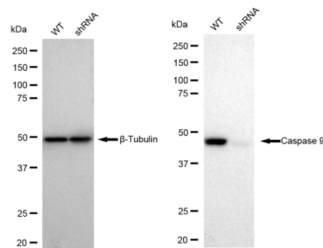
## Background

This gene encodes 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 which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein can undergo autoproteolytic processing and activation by the apoptosome, a protein complex of cytochrome c and the apoptotic peptidase activating factor 1; this step is thought to be one of the earliest in the caspase activation cascade. This protein is thought to play a central role in apoptosis and to be a tumor suppressor. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2013]

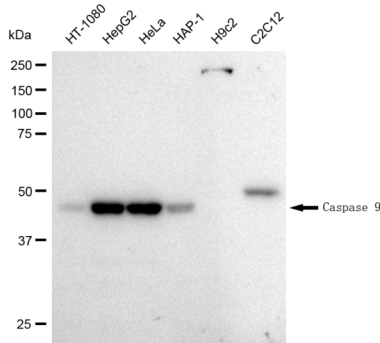
## Research Area

Cell Biology,Cancer,Metabolism,Neuroscience

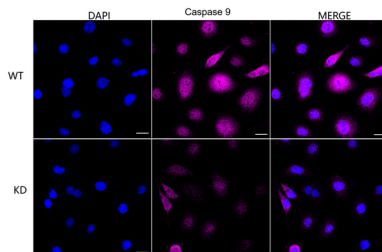
## Image Data



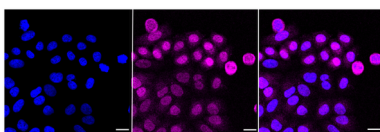
Western blotting analysis using Caspase 9 antibody (KVA01247). Caspase 9 expression in wild type (WT) and Caspase 9 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with Caspase 9 antibody (KVA01247, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



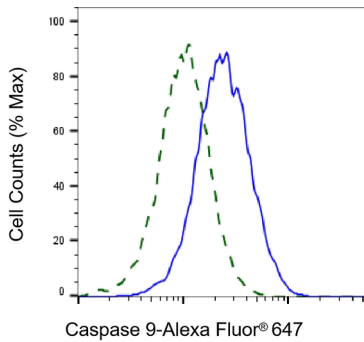
Western blotting analysis using Caspase 9 antibody (KVA01247). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Caspase 9 antibody (KVA01247, 1:2,500) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



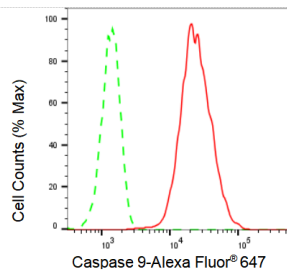
Immunocytochemical staining of HeLa cells using Caspase 9 antibody (KVA01247, 1:1,000), Top panel: wild-type (WT); Bottom panel: Caspase 9 shRNA knockdown (KD). Nuclei were stained blue with DAPI;Caspase 9 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with caspase 9 antibody (KVA01247, 1:1,000). Nuclei were stained blue with DAPI; Caspase 9 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: medium. Scale bar: 20 µm.



Validation of Caspase 9 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Caspase 9 antibody (KVA01247, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Caspase 9 expression in HepG2 cells using Caspase 9 antibody (KVA01247, 1:2,000). Green, isotype control; red, Caspase 9.