# Anti-Smac/Diablo Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R014293

## Product Information

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| Application | WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA |
| Reactivity | Human, Mouse, Rat |
| Dilution | WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200 |
| Host | Rabbit |
| Clonality | Monoclonal |
| Clone No. | 65I12N81 |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthesized peptide derived from human Smac/Diablo |
| Format | Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-Smac/Diablo Rabbit mAb [65I12N81] is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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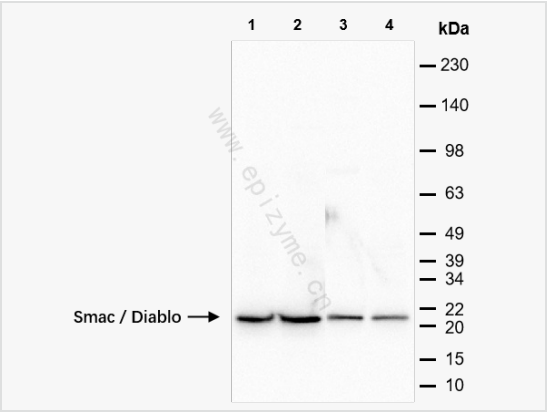
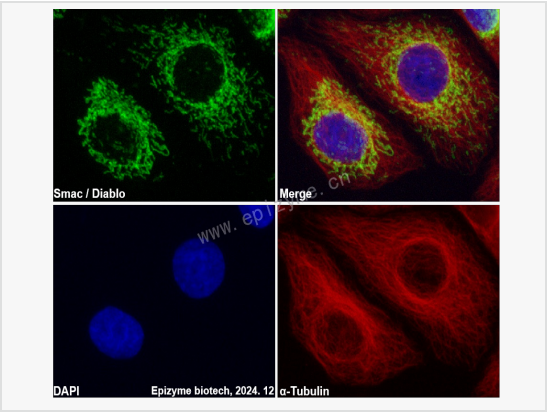
| Synonyms | 0610041G12Rik, DBLOH_HUMAN, DBOH, DFNA64, diablo, Diablo homolog (Drosophila), Diablo homolog, Diablo homolog mitochondrial, Diablo IAP binding mitochondrial protein, Diablo like protein, DIABLO S, Direct IAP binding protein with low pI, Direct IAP-binding protein with low pI, FLJ10537, FLJ25049, mitochondrial, Mitochondrial Smac protein, Second mitochondria derived activator of caspase, Second mitochondria-derived activator of caspase, second mitochondrial activator of caspases, SMAC 3, Smac, Smac protein, SMAC3. |
| Calculated MW | Calculated MW: 27 kDa; Observed MW: 21 kDa |
| Uniprot ID | Q9NR28 |
| Gene ID | 56616 |
| Background | Smac/Diablo is a 21 kDa mammalian mitochondrial protein that functions as a regulatory component during apoptosis. Upon mitochondrial stress, Smac/Diablo is released from mitochondria and competes with caspases for binding of IAPs (inhibitor of apoptosis proteins). The interaction of Smac/Diablo with IAPs relieves the inhibitory effect of the IAPs on caspases. |
| Cellular Location | Mitochondrion. Released into the cytosol when cells undergo apoptosis. |
| Tissue Location | Ubiquitously expressed with highest expression in testis. Expression is also high in heart, liver, kidney, spleen, prostate and ovary. Low in brain, lung, thymus and peripheral blood leukocytes. |

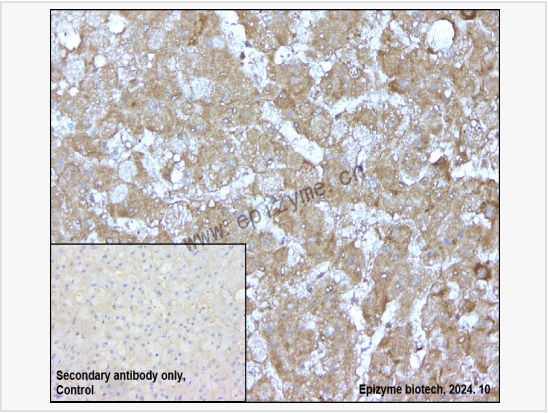
## Validation Images



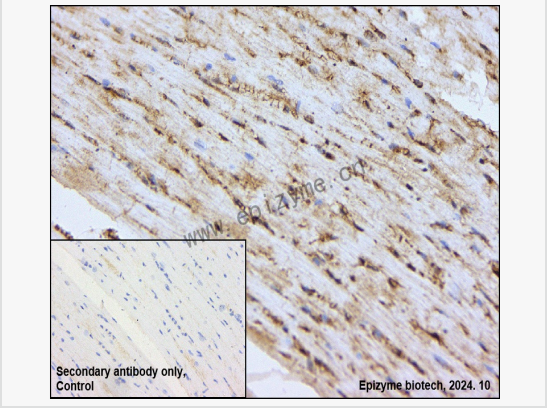

Western Blot - Anti-Smac/Diablo Rabbit mAb [65I12N81]
All lanes: R014293 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: Rat heart whole tissue lysates
Lane 4: Rat muscle whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 27 kDa
Observed band size: 21 kDa
Developed using the ECL technique (Cat. No. SQ201).




Immunofluorescence - Anti-Smac/Diablo Rabbit mAb [65I12N81]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R014293 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).




Immunohistochemistry - Anti-Smac/Diablo Rabbit mAb [65I12N81]
Sample: Paraformaldehyde-fixed, paraffin embedded human hepatoma tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014293 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.




Immunohistochemistry - Anti-Smac/Diablo Rabbit mAb [65I12N81]
Sample: Paraformaldehyde-fixed, paraffin embedded mouse heart tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014293 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.