

## 10-1004: Monoclonal Antibody to Caspase-3 (Clone: ABM11D3)

|                                |   |
|--------------------------------|---|
| <b>Clonality :</b>             | Monoclonal  |
| <b>Clone Name :</b>            | ABM11D3   |
| <b>Application :</b>           | IHC,FACS,WB   |
| <b>Reactivity :</b>            | Mouse,Human   |
| <b>Gene :</b>                  | CASP3   |
| <b>Gene ID :</b>               | 836   |
| <b>Uniprot ID :</b>            | P42574  |
| <b>Format :</b>                | Purified  |
| <b>Alternative Name :</b>      | Apopain, Cysteine protease CPP32, SREBP cleavage activity, SCA-1                          |
| <b>Isotype :</b>               | Mouse IgG1  |
| <b>Immunogen Information :</b> | Full length recombinant protein of Caspase-3 was used as the immunogen for this antibody. |

### Description

Caspases are a member of the cysteine-aspartic acid protease family. Caspase-3 (31 kDa) is an executionary caspase which directly cleaves and activates poly(ADP-ribose) polymerase (PARP), sterol regulatory element binding proteins (SREBPs) or it can also interact with other caspases like caspase-6, -7 and -9. Increased levels of caspase-3 are involved in Huntington Disease-associated cell death. Caspase-3 is the principal caspase in mediating the cleavage of amyloid-beta 4A precursor protein (APP), which is related with neuronal death in Alzheimer's disease. Like other caspases, caspase-3 is also synthesized as a zymogen procaspase which is activated by specific proteolytic cleavage. High levels of caspase-3 are observed in lung, spleen, heart, liver and kidney, moderate levels in brain and skeletal muscle, and low in testis.

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 25 µg / 100 µg  |
| <b>Purification :</b>      | Protein G Chromatography  |
| <b>Content :</b>           | 25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.                |
| <b>Storage condition :</b> | Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles. |

### Application Note

WB: 0.5-4 µg/ml, FACS: 0.5-1 µg/10<sup>6</sup>, IHC: 5-10 µg/ml

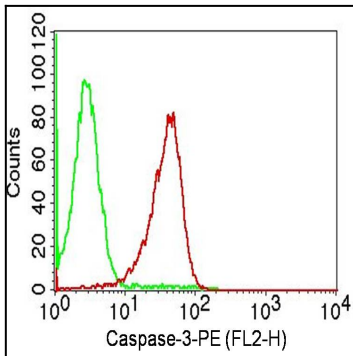


Fig. 1: Intracellular flow analysis of Caspase3 on Jurkat cells using 0.5  $\mu\text{g}/10^6$  cells of antibody (Clone: ABM11D3). Green represents isotype control; red represents anti-Caspase-3 antibody. Goat anti-mouse PE conjugate was used as secondary. (Cells were fixed with 4% paraformaldehyde for 10 min and washed with PBS by centrifuging at 1100 for 5 min followed by permeabilization for 20 min and washed again as mentioned above. Then cell were incubated with primary antibody for 45 min. and after washing the cells twice in PBS, incubated with conjugated secondary antibody for 30 min. Data acquisition was done after washing twice with PBS as mentioned above).

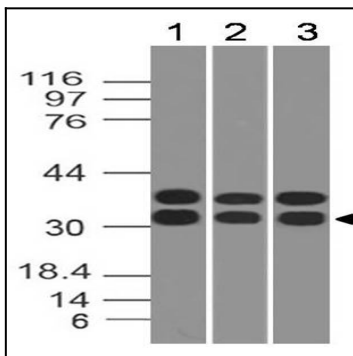


Fig. 2: Western blot analysis of Caspase-3. Anti-Caspase-3 antibody (Clone: ABM11D3) was used at 0.5  $\mu\text{g}/\text{ml}$  on Jurkat, Ramos and Raji lysates.

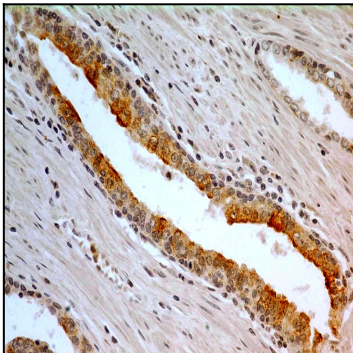


Fig-3: Immunohistochemical analysis of Caspase-3 in human Prostate using anti-Caspase-3 antibody (Clone: ABM11D3) at 5  $\mu\text{g}/\text{ml}$ .

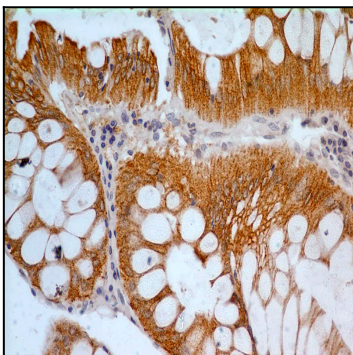


Fig-4: Immunohistochemical analysis of Caspase-3 in human Rectum using anti-Caspase-3 antibody (Clone: ABM11D3) at 5  $\mu\text{g}/\text{ml}$ .

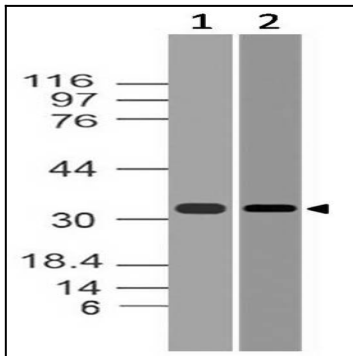


Figure-5: Western blot analysis of Caspase-3. Anti-Caspase-3 antibody (Clone: ABM11D3) was used at 2  $\mu\text{g/ml}$  on (1) 3T3 and (2) EL-4 lysates.