Caspase 3/p17/p19 Polyclonal antibody

Catalog Number: 19677-1-AP

**Basic Information**

- **Catalog Number:** 19677-1-AP
- **Size:** 150μl, Concentration: 600μg/ml by Nanodrop and 273 μg/ml by Bradford method using BSA as the standard.
- **Source:** Rabbit
- **Isotype:** IgG
- **GenBank Accession Number:** NM_004346
- **GeneID (NCBI):** 836
- **Full Name:** caspase 3, apoptosis-related cysteine peptidase
- **Calculated MW:** 32 kDa
- **Observed MW:** 32-35 kDa, 17 kDa, 19 kDa
- **Purification Method:** Antigen affinity purification
- **Recommended Dilutions:**
  - WB: 1:500-1:2000
  - IP: 0.5-4.0 μg for IP and 1:200-1:1000 for WB
  - IHC: 1:50-1:500
  - IF: 1:50-1:500

**Applications**

- **Tested Applications:** FC, IF, IHC, IP, WB, ELISA
- **Cited Applications:** ELISA, IHC, WB
- **Species Specificity:** human, mouse, rat
- **Cited Species:** Astragalus membranaceus, Bovine, chicken, duck, Goat, hamster, human, monkey, mouse, pig

**Note-IHC:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Background Information**

Caspases, a family of endoproteases, are critical players in cell regulatory networks controlling inflammation and cell death. Initiator caspases (caspase-2, -8, -9, -10, -11, and -12) cleave and activate downstream effector caspases (caspase-3, -6, and -7), which in turn execute apoptosis by cleaving targeted cellular proteins. Caspase 3 (also named CPP32, SCA-1, and Apopain) proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at the beginning of apoptosis. Caspase 3 plays a key role in the activation of sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Caspase 3 can also form heterocomplex with other proteins and performs the molecular mass of 50-70 kDa. This antibody can recognize p17, p19 and p32 of Caspase 3.

**Notable Publications**

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tong Li</td>
<td>33152931</td>
<td>Biomed Pharmacother</td>
<td>WB</td>
</tr>
<tr>
<td>Xinxin Yan</td>
<td>27684494</td>
<td>J Biomed Mater Res A</td>
<td>WB</td>
</tr>
<tr>
<td>Lei Liu</td>
<td>30273566</td>
<td>Chem Biol Interact</td>
<td>WB</td>
</tr>
</tbody>
</table>

**Storage**

- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) [toll free in USA], or 1(312) 455-8498 (outside USA)
E: proteintechn@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Untreated and Staurosporine treated Jurkat cells were subjected to SDS PAGE followed by western blot with 19677-1-AP (Caspase 3 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.

WB result of Caspase 3 antibody (19677-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Caspase 3 transfected Jurkat cells.

IP result of anti-Caspase 3 (IP:19677-1-AP, 4ug; Detection 19677-1-AP 1:300) with NIH/3T3 cells lysate 3440 ug.

Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19677-1-AP (Caspase 3 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19677-1-AP (Caspase 3 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

1X10^6 HepG2 cells were intracellularly stained with 0.2 ug Anti-Human Caspase 3/p17/p19 (19677-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Control Antibody. Cells were fixed with 90% MeOH.

Immunofluorescent analysis of (-20 Degrees Ethanol) fixed NIH/3T3 cells using 19677-1-AP (Caspase 3 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).