**Basic Information**

- **Catalog Number:** 55238-1-AP
- **Size:** 150μl, Concentration: 550 μg/ml by Nanodrop and 400 μg/ml by Bradford method using BSA as the standard
- **Source:** Rabbit
- **Isotype:** IgG
- **GenBank Accession Number:** NR_000035
- **GeneID (NCBI):** 120329
- **Full Name:** caspase 12 (gene/pseudogene)
- **Calculated MW:** 39 kDa
- **Observed MW:** 36-42 kDa, 50 kDa
- **Purification Method:** Antigen affinity purification
- **Recommended Dilutions:**
  - WB: 1:500-1:2000
  - IP: 0.5-4.0 ug for IP and 1:500-1:2000 for WB
  - IHC: 1:50-1:500
  - IF: 1:50-1:500

**Applications**

- **Tested Applications:** IF, IHC, IP, WB, ELISA
- **Cited Applications:** IF, IHC, WB
- **Species Specificity:** human
- **Cited Species:** human, hamster, pig
- **Note-IHC:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0
- **Positive Controls:**
  - WB: HEK-293 cells, multi-cells
  - IP: HEK-293 cells,
  - IHC: human prostate hyperplasia tissue, human heart tissue
  - IF: HeLa cells

**Background Information**

Caspase 12 is an enzyme known as a cysteine protease. It belongs to a family of enzymes called caspases that cleave their substrates at C-terminal aspartic acid residues. It is most highly related to members of the ICE subfamily of caspases that process inflammatory cytokines. Caspase-12 is located in the endoplasmic reticulum (ER). It is responsible for ER-stress-induced apoptosis, such as high calcium concentration, low oxygen and low glucose levels. Caspase-12 Antibody detects endogenous levels of full-length caspase-12 protein (50 kDa) and its cleaved product (40-44 kDa). This antibody does not cross-react with other caspases.

**Notable Publications**

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<th>Author</th>
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<td>Meng Wang</td>
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**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

*** 20ul sizes contain 0.1% BSA
HEK-293 cells were subjected to SDS PAGE followed by western blot with 55238-1-AP (CASP12 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.

WB result of 55238-1-AP (CASP12 antibody) with various lysates.

Immunohistochemical analysis of paraffin-embedded human prostate hyperplasia tissue slide using 55238-1-AP (Caspase 12 Antibody) at dilution of 1:200 (under 10x lens).

Immunohistochemical analysis of paraffin-embedded human prostate hyperplasia tissue slide using 55238-1-AP (Caspase 12 Antibody) at dilution of 1:200 (under 40x lens).

Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 55238-1-AP (Caspase 12 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).