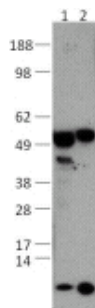


Anti-Mouse Caspase 12 Purified

Catalog Number: 14-9950

Also Known As: Caspase12

RUO: For Research Use Only



Lysates prepared under reducing conditions from L929 cells (lane 1) or PC12 cells (lane 2) were resolved by SDS-PAGE then immunoblotted with 2 µg/ml of Anti-Mouse Caspase 12 Purified. Bands were visualized using Anti-Rat IgG HRP.

Product Information

Contents: Anti-Mouse Caspase 12 Purified


REF Catalog Number: 14-9950

Clone: 14F7

Concentration: 0.5 mg/ml


Host/Isotype: Rat IgG2a

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 Temperature Limitation: Store at 2-8°C.

LOT Batch Code: Refer to Vial

 Use By: Refer to Vial

 Caution, contains Azide

Description

The monoclonal antibody 14F7 recognizes mouse and rat caspase-12. Caspase-12, a 53-60kDa protein, is a cysteine-requiring aspartate protease that plays a role in apoptosis. Expression is ubiquitous and localized to the endoplasmic reticulum. Caspase-12 is believed to mediate apoptosis in response to endoplasmic reticulum (ER) stress rather than Fas mediated apoptosis. Reagents that affect calcium levels, such as A23187, affect oxygen levels, or affect the ER secretory pathway, such as brefeldin-A, all induce ER stress thereby activating procaspase-12 cleavage. Caspase-12 is colocalized to the ER with several proteins that are involved in Alzheimer's disease including b-amyloid precursor protein (APP) and presenilin. Caspase-9 has been identified as an *in vitro* substrate of caspase-12. The monoclonal antibody 14F7 recognizes full length caspase-12.

Applications Reported

This 14F7 antibody has been reported for use in immunoprecipitation, immunoblotting (WB), and immunohistology staining of paraffin embedded tissue sections.

Applications Tested

This 14F7 antibody has been tested by immunoblot analysis of mouse cell lines. This can be used at 1-5 µg/ml. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Morishima N, Nakanishi K, Takenouchi H, Shibata T, Yasuhiko Y. An endoplasmic reticulum stress-specific caspase cascade in apoptosis. Cytochrome c-independent activation of caspase-9 by caspase-12. *J Biol Chem*. 2002 Sep 13;277(37):34287-94

Nakagawa T, Yuan J. Cross-talk between two cysteine protease families. Activation of caspase-12 by calpain in apoptosis. *J Cell Biol*. 2000 Aug 21;150(4):887-94.

Nakagawa T, Zhu H, Morishima N, Li E, Xu J, Yankner BA, Yuan J. Caspase-12 mediates endoplasmic-reticulum-specific apoptosis and cytotoxicity by amyloid-beta. *Nature*. 2000 Jan 6;403(6765):98-103. (14F7, IF (paraformaldehyde fixed cells), WB PubMed)

Related Products

14-4321 Rat IgG2a K Isotype Control Purified

14-6207 Anti-Caspase 12 Purified (Polyclonal)

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