

Caspase 12 Antibody

Catalog No: #48277



Package Size: #48277-1 50ul #48277-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

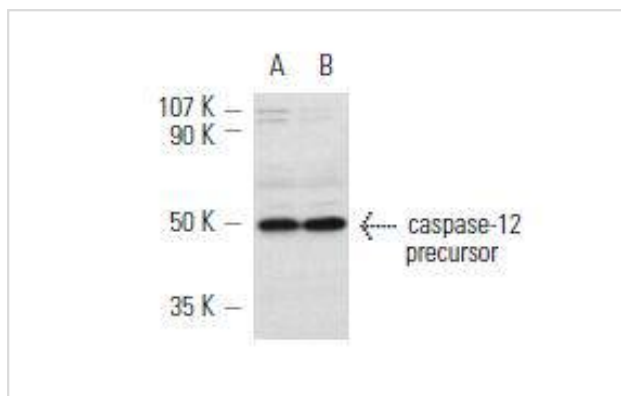
Description

| | |
|-----------------------|--|
| Product Name | Caspase 12 Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Purification | Immunogen affinity purified |
| Applications | WB, IP, IF |
| Species Reactivity | Hu, Ms, Rt |
| Immunogen Description | peptide |
| Other Names | CASP 12 antibody CASP-12 antibody Casp12 antibody CASP12P1 antibody caspase 12 (gene/pseudogene) antibody caspase 12 pseudogene 1 antibody CASPC_HUMAN antibody Inactive caspase-12 antibody OTTHUMP00000207032 antibody |
| Accession No. | Swiss-Prot#:O08736 |
| Calculated MW | 50kDa |
| Formulation | 1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide. |
| Storage | Store at -20°C |

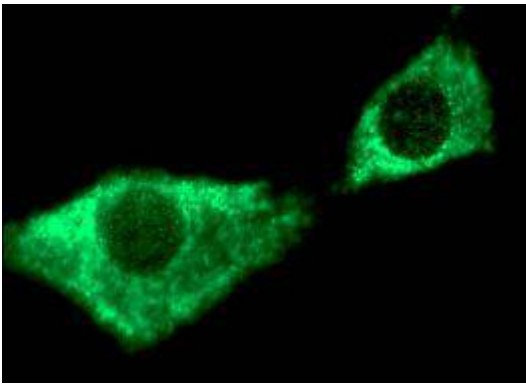
Application Details

WB: 1:100-1,000IP: 1-2 ug per 100-500 ug of total protein (1ml of cell lysate)

Images



Western blot analysis of caspase-12 expression in BC3H1 (A) and UV-treated NIH/3T3 (B) whole cell lysates.



Immunofluorescence staining of methanol-fixed BC3H1 cells showing cytoplasmic localization.

Background

A unique family of cysteine proteases has been described that differs in sequence, structure and substrate specificity from any previously described protease family. This family, termed Ced-3/caspase-1, is composed of caspase-1, caspase-2, caspase-3, caspase-4, caspase-6 and caspase-7 (also designated Mch3, ICE-LAP3 or CMH-1), caspase-9, caspase-10, caspase-14, and caspase-5/caspase-12. Ced-3/caspase-1 family members function as key components of the apoptotic machinery and act to destroy specific target proteins which are critical to cellular longevity. Caspase-5 (also designated TY or ICERelIII) can cleave its own precursor, an activity that requires the cysteine 245 residue. The mouse homolog of caspase-5 is designated caspase-12. Frameshift mutations in caspase-5 have been identified in MMP tumors of the endometrium, colon, and stomach, indicating that caspase-5 may be a new target gene in the microsatellite mutator pathway for cancer.

References

1. Maddalena, F., et al. 2011. Sorcin induces a drug-resistant phenotype in human colorectal cancer by modulating Ca²⁺ homeostasis. *Cancer Res.* 71: 7659-7669.
2. Fatma, N., et al. 2011. Deficiency of Prdx6 in lens epithelial cells induces ER stress response-mediated impaired homeostasis and apoptosis. *Am. J. Physiol., Cell Physiol.* 301: C954-C967.

Published Papers

et al., 5- ζ -nitro- ζ -benzylpropylamino) benzoic acid induces apoptosis of human lens epithelial cells via reactive oxygen species and endoplasmic reticulum stress through the mitochondrial apoptosis pathway. In *Int J Mol Med* on 2021 Apr by Lingzhi Niu, Xin Liu, et al.. PMID:33604681, (2021)
PMID:33604681

Note: This product is for in vitro research use only and is not intended for use in humans or animals.