

Datasheet for 600-401-AC7**Caspase-12 Antibody****Overview**

Description:	Anti-Caspase-12 (RABBIT) Antibody - 600-401-AC7
Item No.:	600-401-AC7
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Three distinct signaling pathways lead to programmed cell death (apoptosis). The death receptor and mitochondrion pathways are the mains, in which the key apoptotic proteases caspase-8 and caspase-9, respectively, are involved. The endoplasmic reticulum (ER) stress is the third apoptotic pathway and caspase-12 is involved. Caspase-12 is localized to the ER but not to cytoplasm or mitochondrion. Caspase-12 is activated by ER stress, including disruption of ER calcium homeostasis, and mediates ER stress-induced apoptosis. Caspase-12 is co-localized to the ER with several proteins that are involved in Alzheimer's disease including gamma-secretase presenilin and beta-amyloid precursor protein (APP). Caspase-12 mediates cytotoxicity induced by amyloid-beta. Caspase-12 is ubiquitously expressed in mouse tissues.
Synonyms:	Caspase-12 Antibody, Caspase-12, CASP-12
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Casp12
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Caspase-12 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid peptide near the internal region of murine Caspase-12.

Purity/Specificity: Anti-Caspase-12 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with Caspase-12 from other sources has not been determined.

Relevant Links:

- [UniProtKB - O08736](#)
- [GeneID - 12364](#)
- [NCBI - CAA73532](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-Caspase-12 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 48 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:10,000

IF: 10 µg/mL

IHC: 2 µg/mL

WB: 1 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

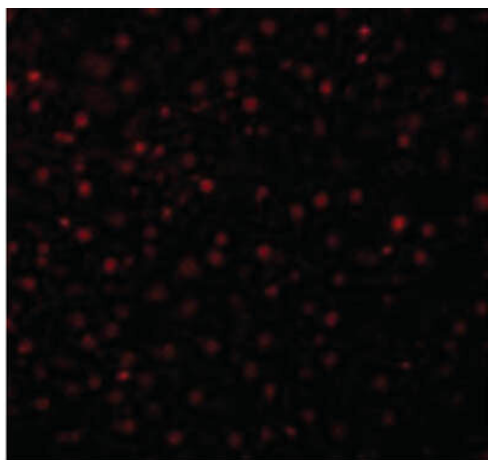
Shipping & Handling

Shipping Condition: Dry Ice

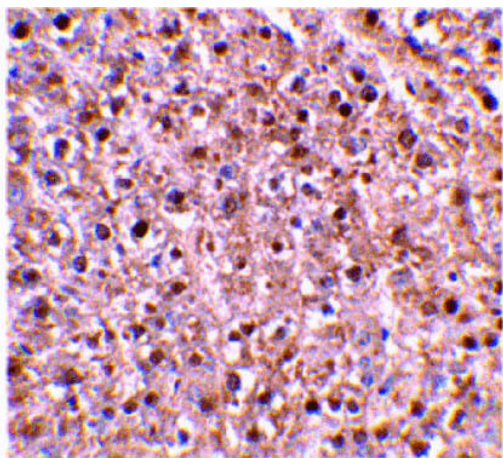
Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration:

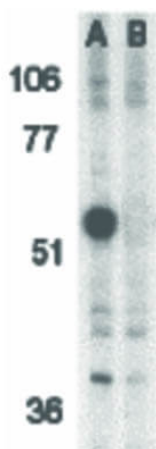
Expiration date is one (1) year from date of receipt.

Images**Immunofluorescence Microscopy**

Immunofluorescence Microscopy of Caspase-12 antibody.
Tissue: Mouse liver cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Caspase-12 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Caspase-12 is localized in the endoplasmic reticulum. Staining: Caspase-12 as red fluorescent signal.

**Immunohistochemistry**

Immunohistochemistry of Caspase-12 antibody. Tissue: Mouse liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Caspase-12 antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Caspase-12 is localized in the endoplasmic reticulum. Staining: Caspase-12 as precipitated brown signal with hematoxylin blue nuclear counterstain.



Western Blot

Western Blot of Caspase-12 antibody. Lane 1: Mouse brain tissue lysate. Lane 2: Mouse brain tissue lysate in the presence of blocking peptide. Load: 35 µg per lane. Primary antibody: Caspase-12 antibody at 1 µg/mL for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 47.9 kDa, 57 kDa for Caspase-12. Other band(s): Caspase-12 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.