

Datasheet for 200-401-Y97**ATR Antibody****Overview**

Description:	Anti-ATR (RABBIT) Antibody - 200-401-Y97
Item No.:	200-401-Y97
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The Anthrax toxin receptor (ATR) was initially discovered as the tumor endothelial marker 8 (TEM8). This protein, which exists in three isoforms (36, 40, and 60 kDa), is highly expressed in tumor vessels as well as in the vasculature of developing embryos, suggesting that it may normally play a role in angiogenesis. However, it also acts as the receptor for anthrax toxin. Following the binding of this protein by the protective antigen (PA) of anthrax, PA is cleaved and heptamerizes to form the binding site for both edema factor (EF) and lethal factor (LF). This complex is then endocytosed by the cell; acidification in endosomes allows the release of EF and LF into the cytoplasm where they interfere with MAPK signaling and induce apoptosis.
Synonyms:	ATR Antibody, ATR, GAPO, TEM8, ATR, Anthrax toxin receptor 1, Tumor endothelial marker 8
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ANTXR1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-ATR antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to 13 amino acids near the C-terminus of human ATR.

Purity/Specificity: Anti-ATR Antibody is purified by ion exchange chromatography. ATR antibody will recognize only the largest isoform.

Relevant Links:

- [UniProtKB - Q9H6X2](#)
- [GeneID - 84168](#)
- [NCBI - NP_444262](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-ATR Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 63 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: 1:5000 - 1:20,000

IF: 10 µg/mL

WB: 0.5 - 2 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

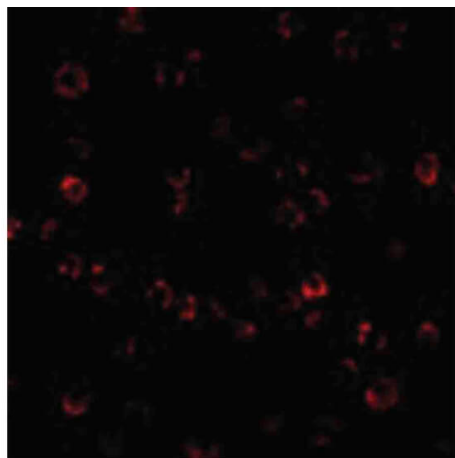
Shipping & Handling

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.

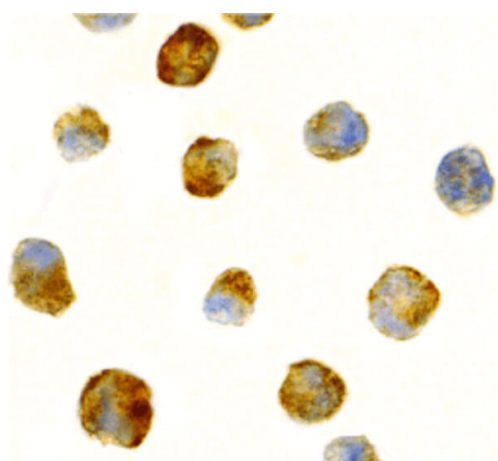
Expiration: Expiration date is one (1) year from date of receipt.

Images



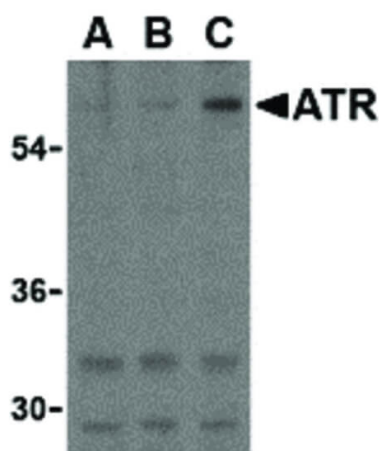
Immunofluorescence Microscopy

Immunofluorescence Microscopy of ATR antibody. Cell Type: K562 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: ATR 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: ATR is located in the cell membrane. Staining: ATR as red fluorescent signal.



Immunohistochemistry

Immunocytochemistry of Rabbit ATR antibody. Cell Type: K562 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ATR 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: ATR is located in the cell membrane. Staining: ATR is stained brown with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of ATR antibody. Lane A: K562 lysates at 0.5 µg/ml. Lane B: K562 lysates at 1 µg/ml. Lane C: K562 lysates at 2 µg/ml. Load: 35 µg per lane. Primary antibody: ATR antibody at designated concentrations 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: 63 kDa, 60 kDa for ATR. Other band(s): ATR 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.