

Product datasheet for **TA306121**

TEM8 (ANTXR1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	ATR antibody can be used for detection of ATR by Western blot at 0.5 to 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 10 µg/mL. Antibody validated: Western Blot in human samples; Immunohistochemistry in human samples and Immunofluorescence in human samples. All other applications and species not yet tested.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	ATR antibody was raised against a peptide corresponding to 13 amino acids near the center of human ATR.
Specificity:	At least three isoforms of ATR are known to exist; this antibody will detect all three isoforms.
Formulation:	PBS containing 0.02% sodium azide.
Concentration:	1ug/ul
Purification:	ATR Antibody is affinity chromatography purified via peptide column.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	anthrax toxin receptor 1
Database Link:	NP_444262 Entrez Gene 84168 Human Q9H6X2



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Background:

The Anthrax toxin receptor (ATR) was initially discovered as the tumor endothelial marker 8 (TEM8) (1). 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 (2). 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) (3). 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 (4).

Synonyms:

ATR; GAPO; TEM8