10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ANTXR1 Antibody (Y382)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7746a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9H6X2
Other Accession	Q6DFX2, P58335, Q0PMD2, Q9CZ52
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15324
Calculated MW	62789
Antigen Region	358-386

Additional Information

Gene ID	84168
Other Names	Anthrax toxin receptor 1, Tumor endothelial marker 8, ANTXR1, ATR, TEM8
Target/Specificity	This ANTXR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 358-386 amino acids from human ANTXR1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ANTXR1 Antibody (Y382) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ANTXR1 {ECO:0000303|PubMed:22912819, ECO:0000312|HGNC:HGNC:21014}
Function	Plays a role in cell attachment and migration. Interacts with extracellular matrix proteins and with the actin cytoskeleton and thereby plays an

	important role in normal extracellular matrix (ECM) homeostasis. Mediates adhesion of cells to type 1 collagen and gelatin, reorganization of the actin cytoskeleton and promotes cell spreading. Plays a role in the angiogenic response of cultured umbilical vein endothelial cells. May also act as a receptor for PLAU. Upon ligand binding, stimulates the phosphorylation of EGFR and ERK1/2 (PubMed:30241478).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell projection, lamellipodium membrane; Single-pass type I membrane protein. Cell projection, filopodium membrane; Single-pass type I membrane protein. Note=At the membrane of lamellipodia and at the tip of actin-enriched filopodia (PubMed:16762926). Colocalizes with actin at the base of lamellipodia (PubMed:16762926)
Tissue Location	Detected in umbilical vein endothelial cells (at protein level). Highly expressed in tumor endothelial cells

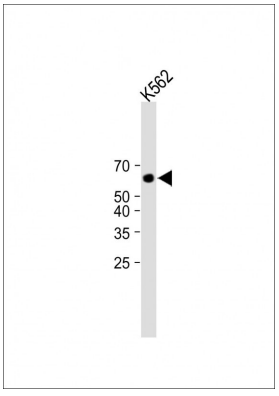
Background

ANTXR1 is a type I transmembrane protein and is a tumor-specific endothelial marker that has been implicated in colorectal cancer. This protein has been shown to also be a docking protein or receptor for Bacillus anthracis toxin, the causative agent of the disease, anthrax. The binding of the protective antigen (PA) component, of the tripartite anthrax toxin, to this receptor protein mediates delivery of toxin components to the cytosol of cells. Once inside the cell, the other two components of anthrax toxin, edema factor (EF) and lethal factor (LF) disrupt normal cellular processes.

References

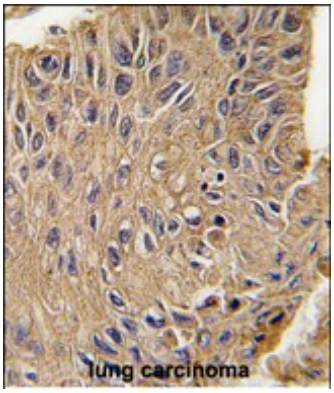
Werner,E., J. Biol. Chem. 281 (32), 23227-23236 (2006)
Wei,W., Cell 124 (6), 1141-1154 (2006)
Rainey,G.J., Proc. Natl. Acad. Sci. U.S.A. 102 (37), 13278-13283 (2005)

Images



All lanes : Anti-ANTXR1 Antibody (Y382) at 1:1000 dilution Lane 1: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 63kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with ANTXR1 Antibody (Y382) (Cat.#AP7746a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



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