

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
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

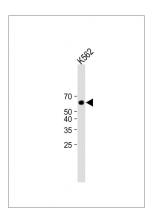
Background

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.