

Phospho-ANTXR1(Y425) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3603a

Specification

Phospho-ANTXR1(Y425) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW

DB,E <u>O9H6X2</u> <u>O0PMD2</u>, <u>O9CZ52</u> Human Mouse, Rat Rabbit Polyclonal Rabbit IgG 62789

Phospho-ANTXR1(Y425) Antibody - 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 phosphopeptide corresponding to amino acid residues surrounding Y425 of human ANTXR1.

Dilution DB~~1:500 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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 Phospho-ANTXR1(Y425) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-ANTXR1(Y425) Antibody - 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:<u>30241478</u>).

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

Phospho-ANTXR1(Y425) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Phospho-ANTXR1(Y425) Antibody - Images



Dot blot analysis of anti-Phospho-ANTXR1-pY425 Antibody (Cat.#AP3603a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-ANTXR1(Y425) Antibody - 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.

Phospho-ANTXR1(Y425) Antibody - References

Werner,E., J. Biol. Chem. 281 (32), 23227-23236 (2006) Abrami,L., J. Cell Biol. 172 (2), 309-320 (2006) Bradley,K.A., Nature 414 (6860), 225-229 (2001)