

Phospho-ANTXR1(Y382) Antibody Blocking peptide Synthetic peptide Catalog # BP3547a

Specification

Phospho-ANTXR1(Y382) Antibody Blocking peptide - Product Information

Primary Accession

<u>Q9H6X2</u>

Phospho-ANTXR1(Y382) Antibody Blocking peptide - Additional Information

Gene ID 84168

Other Names Anthrax toxin receptor 1, Tumor endothelial marker 8, ANTXR1, ATR, TEM8

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP3547a was selected from the region of human Phospho-ANTXR1-pY382. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-ANTXR1(Y382) Antibody Blocking peptide - 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. 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.

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(Y382) Antibody Blocking peptide - Protocols

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

Blocking Peptides

Phospho-ANTXR1(Y382) Antibody Blocking peptide - Images

Phospho-ANTXR1(Y382) Antibody Blocking peptide - 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(Y382) Antibody Blocking peptide - 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)