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Phospho-ANTXR1(Y382) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3547a

Product Information

Application	DB, E
Primary Accession	Q9H6X2
Other Accession	Q6DFX2, P58335, Q0PMD2, Q9CZ52
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15324
Calculated MW	62789

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 Y382 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(Y382) Antibody 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

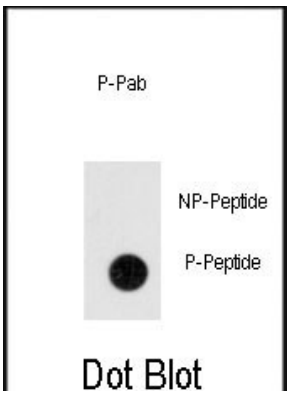
Background

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



Dot blot analysis of anti-Phospho-ANTXR1-pY382 Antibody (Cat.#AP3547a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.