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TEM8 Rabbit pAb

Catalog # AP99605

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9H6X2
Other Accession	Q9H6X2
Reactivity	Human, Mouse
Predicted	Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62789
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TEM8
Epitope Specificity	201-300/564
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the ATR family. Contains 1 VWFA domain.
SUBUNIT	Interacts with gelatin and type 1 collagen. Interacts with the actin cytoskeleton. Binds to the protective antigen (PA) of Bacillus anthracis. Binding does not occur in the presence of calcium.
DISEASE	Defects in ANTXR1 are associated with susceptibility to hemangioma capillary infantile (HCI) [MIM:602089]. HCI are benign, highly proliferative lesions involving aberrant localized growth of capillary endothelium. They are the most common tumor of infancy, occurring in up to 10% of all births. Hemangiomas tend to appear shortly after birth and show rapid neonatal growth for up to 12 months characterized by endothelial hypercellularity and increased numbers of mast cells. This phase is followed by slow involution at a rate of about 10% per year and replacement by fibrofatty stroma.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a type I transmembrane protein and is a tumor-specific endothelial marker that has been implicated in colorectal cancer. The encoded 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. Three alternatively spliced variants that encode different protein isoforms have been described. [provided by RefSeq, Oct 2008]

Additional Information

Gene ID	84168

Other Names	ATR; GAPO; TEM8; 2310008J16Rik; 2810405N18Rik; Antrx1; ANTR1_HUMAN; ANTXR1; Tumor endothelial marker 8; ANTR1_MOUSE; ANTR1_RAT; ANTXR cell adhesion molecule 1; anthrax toxin receptor 1; anthrax toxin receptor; tumor endothelial marker 8 precursor
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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