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Goat Anti-TEM8 / Anthrax Toxin Receptor 1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF2078a

Specification

Goat Anti-TEM8 / Anthrax Toxin Receptor 1 Antibody - Product Information

Application	**WB**
Primary Accession	Q9H6X2
Other Accession	NP_115584, 84168
Reactivity	**Human**
Predicted	**Rat, Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**62789**

Goat Anti-TEM8 / Anthrax Toxin Receptor 1 Antibody - Additional Information

Gene ID 84168

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

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-TEM8 / Anthrax Toxin Receptor 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-TEM8 / Anthrax Toxin Receptor 1 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. 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).

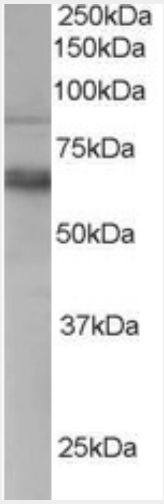
Tissue Location
Detected in umbilical vein endothelial cells (at protein level). Highly expressed in tumor endothelial cells

Goat Anti-TEM8 / Anthrax Toxin Receptor 1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-TEM8 / Anthrax Toxin Receptor 1 Antibody - Images



AF2078a staining (0.3 µg/ml) of Human PBMC lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-TEM8 / Anthrax Toxin Receptor 1 Antibody - Background

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.

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Endocytosis of the anthrax toxin is mediated by clathrin, actin and unconventional adaptors. Abrami L, et al. PLoS Pathog, 2010 Mar 5. PMID 20221438.
Sequential use of transcriptional profiling, expression quantitative trait mapping, and gene association implicates MMP20 in human kidney aging. Wheeler HE, et al. PLoS Genet, 2009 Oct. PMID 19834535.
Direct interaction between anthrax toxin receptor 1 and the actin cytoskeleton. Garlick KM, et al. Biochemistry, 2009 Nov 10. PMID 19817382.
Tumor endothelial marker 8 expression levels in dendritic cell-based cancer vaccines are related to clinical outcome. Venanzi FM, et al. Cancer Immunol Immunother, 2010 Jan. PMID 19440709.
Global, in vivo, and site-specific phosphorylation dynamics in signaling networks. Olsen JV, et al. Cell, 2006 Nov 3. PMID 17081983.