

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 Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>Q9H6X2</u> <u>NP\_115584</u>, <u>84168</u> Human Rat, Dog Goat Polyclonal 100ug/200ul IgG 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

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/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.

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

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



AF2078a staining (0.3  $\mu$ g/ml) of Human PBMC lysate (RIPA buffer, 35  $\mu$ g 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.

## Goat Anti-TEM8 / Anthrax Toxin Receptor 1 Antibody - References

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.