Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Recombinant Human TEM8/ANTXR1 Protein

Catalog No.: RP01098 Recombinant 1 Publications

Sequence Information

Species	Gene ID	Swiss Prot
Human	84168	Q9H6X2-4

Tags
C-His

Synonyms
ANTXR1; ATR; TEM8;Anthrax toxin receptor 1; Tumor endothelial marker 8

Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by SDS-PAGE.

Calculated MW	Observed MW
19.65 kDa	40-50 kDa

Endotoxin
< 0.01 EU/μg of the protein by LAL method

Formulation
Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

400-999-6126

cn.market@abclonal.com.cn

Background

Anthrax toxin receptor 1 (ANTXR1), also known as Tumor endothelial marker 8 (TEM8), is a glycoprotein of the Anthrax Toxin Receptor family that is expressed by endothelial cells. Anthrax toxin receptor 1 contains a 289 amino acid (aa) extracellular domain, a 21 aa transmembrane domain, and a 222 aa cytoplasmic domain. Type I transmembrane isoforms of 564 aa (80-85 kDa) and 368 aa (60 kDa) and potentially secreted isoforms of 330 aa and 297 aa (45 kDa) are differentially expressed. All diverge at the C-terminal end but share the N-terminal extracellular domain . The extracellular domain shares structural similarity with von Willebrand factor type (vWFA) domains, which are characterized by their interactions with ECM components. The extracellular domain is involved in reorganization of cell actin cytoskeleton . Anthrax Receptor 1 binds Anthrax Protective Antigen with lesser affinity that Anthrax Receptor 2 and induces toxin internalization . Anthrax toxin receptor 1 has been implicated in tumor angiogenesis, as its expression has been shown to up-regulate in tumor blood vessels and is characterized as a tumor endothelial marker . ANTXR-1 was reported to be an amplifier of Wnt signaling in tumor microenvironment . Additionally, Anthrax toxin receptor 1 serves as the receptor for Seneca Valley virus, an oncolytic picornavirus affecting neuroendocrine cancers . Human ANTXR1 shares 99% aa identity with mouse and rat and 92% identity with dog and chick ANTXR1 within the extracellular domain.

Basic Information

Description
Recombinant Recombinant Human TEM8/ANTXR1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Glu33-Lys321) of Human TEM8/ANTXR1 (Accession #NP_060623.2) fused with His tag at the C-terminus.

Bio-Activity

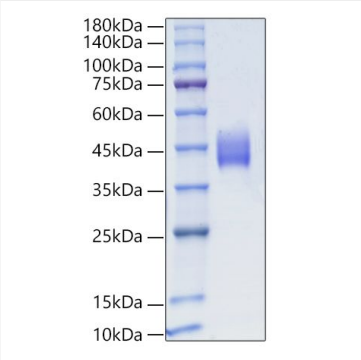
Shipping
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃.Store the lyophilized protein at -20℃ to -80 ℃ up to 1 year from the date of receipt.
After reconstitution, the protein solution is stable at -20℃ for 3 months, at 2-8℃ for up to 1 week.
Avoid repeated freeze/thaw cycles.

Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

* 为了您的安全和健康，请穿实验服并戴一次性手套操作。

Validation Data



Recombinant Human TEM8/ANTXR1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.