

## CMG-2/ANTXR2 Protein, Human (HEK293, Fc)

Cat. No.:	HY-P76151
Synonyms:	Anthrax toxin receptor 2; Capillary morphogenesis gene 2 protein; CMG-2; ANTXR2
Species:	Human
Source:	HEK293
Accession:	P58335-4 (M1-N317)
Gene ID:	118429
Molecular Weight:	Approximately 57.4 kDa.

### PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

Background	CMG-2/ANTXR2 protein is essential for cellular interactions with laminin and the extracellular matrix. In the context of microbial infection, it serves as a receptor for the protective antigen (PA) of Bacillus anthracis. PA binding triggers the heptamerization of the receptor-PA complex, and this complex translocates to glycosphingolipid-rich lipid rafts, where it undergoes internalization through a clathrin-dependent pathway. Within the endosomal membrane and under acidic conditions (pH under 7), the complex undergoes rearrangement, forming a pore that facilitates the escape of other components of anthrax toxin into the cytoplasm. This process highlights the crucial role of CMG-2/ANTXR2 in the cellular response to B. anthracis infection and the subsequent internalization and translocation of anthrax toxin components.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA