

# **Screening Libraries**

**Proteins** 



# **Product** Data Sheet

# Angiopoietin-4 Protein, Human (HEK293, Fc)

Cat. No.: HY-P74411

Synonyms: Angiopoietin-4; AGP4; ANG-3; ANG-4; ANGPT4

Species: Human HEK293 Source:

Accession: Q9Y264 (M282-I503)

Gene ID: 51378

**Molecular Weight:** Approximately 66 kDa

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Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 $\mu$ m 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.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu g/mL$ 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

The Angiopoietin-4 (ANGPT4) protein exhibits a pivotal role as it binds to TEK/TIE2, thereby modulating ANGPT1 signaling. Beyond its regulatory function, ANGPT4 has the capability to induce tyrosine phosphorylation of TEK/TIE2. Notably, it plays a crucial role in promoting endothelial cell survival, migration, and angiogenesis. Structurally, ANGPT4 exists as a homodimer, connected by disulfide linkages, highlighting its oligomeric nature. Its functional interactions with TEK/TIE2 further emphasize its integral role in orchestrating cellular processes essential for angiogenesis and vascular homeostasis.

### **REFERENCES**

[1]. Dittrich GM, et al. Fibroblast GATA-4 and GATA-6 promote myocardial adaptation to pressure overload by enhancing cardiac angiogenesis. Basic Res Cardiol. 2021 Apr 19;116(1):26.

[2]. Wu Z, et al. Single-cell analysis reveals an Angpt4-initiated EPDC-EC-CM cellular coordination cascade during heart regeneration. Protein Cell. 2023 May 8;14(5):350-368.

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 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

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

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