

## Recombinant Human ANG2 Protein(His Tag)

**Catalog Number:** PDMH100179

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

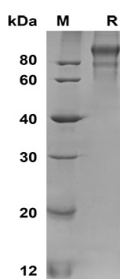
### Description

|                     |                                                                           |
|---------------------|---------------------------------------------------------------------------|
| <b>Species</b>      | Human                                                                     |
| <b>Source</b>       | Mammalian-derived Human ANG2 protein Asp68-Phe496, with an C-terminal His |
| <b>Mol_Mass</b>     | 47.1 kDa                                                                  |
| <b>Accession</b>    | O15123                                                                    |
| <b>Bio-activity</b> | Not validated for activity                                                |

### Properties

|                       |                                                                                                                                                                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>         | > 90% as determined by reducing SDS-PAGE.                                                                                                                                                                                              |
| <b>Endotoxin</b>      | < 1.0 EU/mg of the protein as determined by the LAL method                                                                                                                                                                             |
| <b>Storage</b>        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.                                                                                                                                                        |
| <b>Formulation</b>    | Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.                                                                                                                                                  |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis                                                                                                |

### Data



SDS-PAGE analysis of Human ANG2 proteins, 2µg/lane of Recombinant Human ANG2 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 100-120 kDa

### Background

### For Research Use Only

Angiopoietin-2 (ANG2, or ANGPT2), is a member of the ANG family, which plays an important role in angiogenesis during the development and growth of human cancers. Both ANGPT-1 and ANGPT-2 appear to bind to the tyrosine kinase receptor, Tie-2, found primarily on the luminal surface of endothelial cells. ANG-2's role in angiogenesis generally is considered as an antagonist for ANG1, inhibiting ANG1-promoted Tie2 signaling, which is critical for blood vessel maturation and stabilization. ANG-2 modulates angiogenesis in a cooperative manner with another important angiogenic factor, vascular endothelial growth factor A. Genetic studies have revealed that ANG-2 also is critical in lymphangiogenesis during development. ANG-2 has multiple physiologic effects that regulate vascular tone, hormone secretion, tissue growth and neural activity. Several reports indicate that ANG-2 can induce neovascularization in experimental systems due to the expression of different growth factors such as angiopoietin 2, vascular endothelial factor, and its receptor, fibroblast growth factor, platelet derived growth factor, transforming growth factor beta and epidermal growth factor. In addition, ANG-2 is strongly expressed in the vasculature of many tumors and it has been suggested that ANG-2 may act synergistically with other cytokines such as vascular endothelial growth factor to promote tumor-associated Angiogenesis and tumor progression.

## For Research Use Only

Toll-free: 1-888-852-8623  
Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086  
Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017

Rev. V1.0