

# **Mouse Angiopoietin-2 Antibody**

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF7186

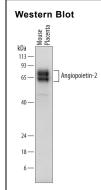
DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse Angiopoietin-2 in direct ELISAs and Western blots. In direct ELISAs, less than 2% cross-reactivity with recombinant human Angiopoietin-2, recombinant mouse (rm) Angiopoietin-1, and rmAngiopoietin-3 is observed.	
Source	Polyclonal Sheep IgG	
Purification	Antigen Affinity-purified	
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Angiopoietin-2 Asp68-Phe496 Accession # O35608	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

#### APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.2 μg/mL	See Below

## DATA



Detection of Mouse Angiopoletin-2 by Western Blot. Western blot shows lysates of mouse placenta tissue. PVDF membrane was probed with 0.2 μg/mL of Sheep Anti-Mouse Angiopoietin-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7186) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). Specific bands were detected for Angiopoietin-2 at approximately 60 to 75 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final	al concentration of 0.2 mg/mL.

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

\*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

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- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

### BACKGROUND

Angiopoietin-2 (Ang-2; also ANGPT2) is a secreted 66-70 kDa glycoprotein member of the angiopoietin family of growth factors. It is expressed by endothelial cells, macrophages and skeletal muscle fibers, and binds to the Tie2 receptor on select cell types, including endothelial cells and monocytes. Ang-2 has multiple functions. In the presence of growth factors, it promotes angiogenesis; in the absence of growth factors, it induces vascular regression. It is generally considered to be an antagonist of Ang-1 activity. Mature mouse Ang-2 is 478 amino acids (aa) in length (aa 19-496). It contains one coiled-coil region (aa 159-256) plus a C-terminal Fibrinogen-like domain (aa 275-495). Mouse Ang-2 undergoes covalent oligomerization, forming 140 kDa homodimers and 280 kDa homotetramers. The higher-order oligomers are strong Tie-2 agonists. Over aa 68-496, mouse Ang-2 shares 87% and 96% aa sequence identity with human and rat Ang-2, respectively.

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