

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Angiopoietin-2 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse (rm) Angiopoietin-1, rmAngiopoietin-3, recombinant human (rh) Angiopoietin-2, and rhAngiopoietin-4
Source	Monoclonal Rat IgG _{2A} Clone # 748246
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Angiopoietin-2 Asp68-Phe496 Accession # O35608
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

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

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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.

PRODUCT SPECIFIC NOTICES

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