

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Angiopoietin-3 in direct ELISA and Western blots. In Western blots, less than 1% cross-reactivity with recombinant human (rh) Angiopoietin-1, rhAngiopoietin-2, rhAngiopoietin-like factor, and rhAngiopoietin-4 is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 113504
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse Angiopoietin-3
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

Mouse Angiopoietin-3 (ANG-3) (1), is a secreted glycoprotein belonging to the angiopoietin family. It has the characteristic structural motifs of angiopoietins including the coiled-coiled domain near the amino-terminus and a fibrinogen-like domain at the C-terminus. Mouse ANG-3 cDNA encodes a 509 amino acid (aa) precursor protein with a 21 aa signal peptide. It shares 47%, 46% and 54% aa sequence identity with mouse ANG-1, mouse ANG-2 and human ANG-4, respectively. Although the sequence homology is much higher between the human and mouse counterparts for ANG-1 (97%) and ANG-2 (85%), mouse ANG-3 is believed to be an ortholog of human ANG-4 based on chromosomal localization studies (1, 2). Human ANG-4 is highly expressed in lung and in cultured human umbilical vein endothelial cells (HUVECs). In contrast, mouse ANG-3 is expressed in multiple mouse tissues. Human ANG-4 is an agonist that can bind and activate Tie-2, a receptor tyrosine kinase with immunoglobulin and epidermal growth factor homology domains expressed primarily on endothelial cells and early hematopoietic cells (2, 3). Mouse ANG-3 has been reported to be a Tie-2 antagonist. It is likely that mouse ANG-3, like ANG-2, may exert agonist or antagonist activities depending on the cell context (1, 3, 4).

PRODUCT SPECIFIC NOTICES

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