Human Angiopoietin-4 Alexa Fluor® 350-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 156210

Catalog Number: FAB9641U

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Angiopoietin-4 in ELISAs. In sandwich immunoassays, no cross-reactivity or interference with recombinant human (rh) Angiopoietin-1, -2, rhAngiopoietin-like 3, rhAngiopoietin-like 4, rhTie-2, or recombinant mouse Angiopoietin-3 was
Source	Monoclonal Mouse IgG_{2B} Clone # 156210
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Angiopoietin-4 Met1-Ile503 Accession # Q9Y264
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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.*

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	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

Human Angiopoietin-4 (Ang-4) (1), alternatively named Ang-3 (2), 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. Human Ang-4 cDNA encodes a 503 amino acid (aa) precursor protein with a 23 aa signal peptide. It shares 45%, 47% and 54% aa sequence identity with human Ang-1, human Ang-2 and mouse Ang-3, 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 (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 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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