Human Endocan/ESM-1 Alexa Fluor® 532-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1810X
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Endocan in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 20% cross-reactivity with recombinant mouse Endocan is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Endocan/ESM-1 Trp20-Arg184 Accession # Q9NQ30
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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.*

Neutralization	Optimal dilution of this antibody should be experimentally determined.
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

Endocan, also known as endothelial-cell specific molecule-1 (ESM-1), is a secreted cysteine-rich dermatan sulfate (DS) proteoglycan primarily expressed by endothelial cells within the vascular capillary network in kidney and in the alveolar walls of the lung (1). Endocan expression has also been detected in different epithelia and in adipocytes (2, 3). The expression of endocan is upregulated by TNF-α, IL-1β, or lipopolysaccharide and down-regulated by IFN-γ (1). The human Endocan gene encodes a 184 amino acid (aa) residues precursor protein with a 19 aa hydrophobic signal peptide and a 165 aa mature region with 18 Cysteine residues (1). The DS chain is covalently attached to serine 137 (4). Endocan has been shown to bind CD11a/CD18 integrin (also known as lymphocyte function-associated antigen-1, LFA-1) on human lymphocytes, monocytes and Jurkat cells, inhibiting its binding to ICAM-1 and reducing LFA-1-mediated leukocyte activation (5). Endocan binds via its DS chain to hepatocyte growth factor (HGF) to enhance HGF mitogenic activity (3, 6). Genetically engineered cells overexpressing endocan has been shown to induce tumor formation, suggesting that Endocan may be involved in the pathophysiology of tumor growth *in vivo* (3, 6). Circulating Endocan can be detected in the serum from healthy subjects. In patients with lung cancer or acute and severe sepsis, elevated Endocan concentrations have been reported (2, 6).

PRODUCT SPECIFIC NOTICES

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