

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Endothelin-1 C-Terminus. Recognizes the C-terminal region of mature Endothelin-1, -2, and -3 (amino acid residues 15-21).
Source	Monoclonal Rat IgG _{2B} Clone # 3G10
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human Endothelin-1
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.

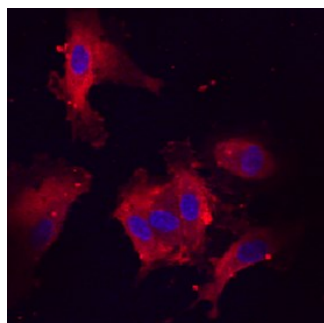
APPLICATIONS

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
Immunocytochemistry	8-25 µg/mL	See Below
ELISA	<p>This antibody functions as an ELISA capture antibody when paired with Mouse Anti-Human Endothelin-1 C-Terminus Monoclonal Antibody (Catalog # MAB34401).</p> <p><i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Endothelin Pan Specific DuoSet ELISA Kit (Catalog # DY1160) for convenient development of a sandwich ELISA or the Endothelin-1 Quantikine ELISA Kit (Catalog # DET100) for a complete optimized ELISA.</i></p>	

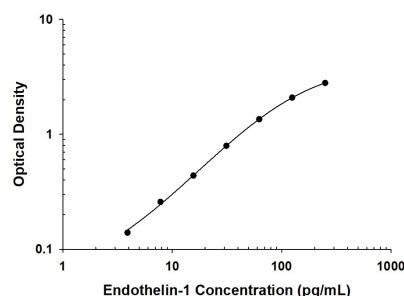
DATA

Immunocytochemistry



Endothelin-1 in HUVEC Human Cells.
Endothelin-1 was detected in immersion fixed HUVEC human umbilical vein endothelial cells using Rat Anti-Human Endothelin-1 C-Terminus Monoclonal Antibody (Catalog # MAB3440) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

ELISA



Human Endothelin-1 ELISA Standard Curve. Recombinant Human Endothelin-1 protein was serially diluted 2-fold and captured by Rat Anti-Human Endothelin-1 C-Terminus Monoclonal Antibody (Catalog # MAB3440) coated on a Clear Polystyrene Microplate (Catalog # [DY990](#)). Mouse Anti-Human Endothelin-1 C-Terminus Monoclonal Antibody (Catalog # [MAB34401](#)) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # [DY998](#)) followed by Substrate Solution (Catalog # [DY999](#)) and stopping the enzymatic reaction with Stop Solution (Catalog # [DY994](#)).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> 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

Endothelin-1, -2, and -3 are encoded by three separate genes as prepropeptides that are cleaved to yield inactive big endothelins. Big Endothelins are further cleaved to generate the 21 amino acid bioactive mature peptides. Endothelin-1 has potent vasoconstricting and angiogenic activity that is mediated through the 7TM receptors, ET-A and ET-B. Endothelin-1, -2, and -3 share identical amino acid sequences at their C-termini (residues 15-21).