

rat endothelium (OX43): sc-53109

BACKGROUND

The endothelium is located at the interface between the blood and the vessel wall. Endothelial cells are in close contact and form a slick layer that prevents blood cell interaction with the vessel wall as blood moves through the vessel lumen. The endothelium consists of simple squamous epithelial cells that line the lumen of all blood vessels. It plays a critical role in the mechanics of blood flow as well as the regulation of coagulation, leukocyte adhesion and vascular smooth muscle cell growth. The endothelium also serves as a barrier between the transvascular diffusion of liquids and solutes. The endothelial tissue is highly dynamic, and it performs several various active functions, such as the secretion and modification of vasoactive substances and the contraction and relaxation of vascular smooth muscle.

REFERENCES

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SOURCE

rat endothelium (OX43) is a mouse monoclonal antibody raised against peritoneal macrophages of rat origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

rat endothelium (OX43) is available conjugated to agarose (sc-53109 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53109 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53109 PE), fluorescein (sc-53109 FITC), Alexa Fluor[®] 488 (sc-53109 AF488), Alexa Fluor[®] 546 (sc-53109 AF546), Alexa Fluor[®] 594 (sc-53109 AF594) or Alexa Fluor[®] 647 (sc-53109 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-53109 AF680) or Alexa Fluor[®] 790 (sc-53109 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

rat endothelium (OX43) is recommended for detection of a 90 kDa antigen on all vascular endothelial cells of mouse and rat origin by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Molecular Weight of rat endothelium: 90 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

SELECT PRODUCT CITATIONS

- Gomez-Lopez, N., Tanaka, S., Zaeem, Z., Metz, G.A. and Olson, D.M. 2013. Maternal circulating leukocytes display early chemotactic responsiveness during late gestation. *BMC Pregnancy Childbirth* 13: S8.
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RESEARCH USE

For research use only, not for use in diagnostic procedures.