

EPCR (LMR-42): sc-57106

BACKGROUND

Thrombomodulin™ is an endothelial specific receptor that forms a complex with thrombin, a protein with procoagulant, inflammatory and anticoagulant effects. The TM/thrombin complex activates protein C (PC) to generate activated protein C (APC) and initiate the APC anticoagulant pathway. APC attenuates thrombin formation through the inactivation, by limited proteolysis, of two significant cofactors of blood clot formation, Factor Va and Factor VIIIa. This process is augmented by the activity of the endothelial cell Protein C receptor (EPCR), which binds both PC and APC with high affinity. The EPCR gene maps to human chromosome 20q11.22 and encodes an anticoagulant that is preferentially expressed on large blood vessel endothelium in the heart and lung with some expression in capillaries in the lung and skin. EPCR, also designated CCD41 in mouse, is a member of the major histocompatibility complex and displays significant homology to CD1. Soluble plasma EPCR is thought to inhibit the membrane-bound EPCR activation of the APC pathway.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PROCR (human) mapping to 20q11.22; Procr (mouse) mapping to 2 H1.

SOURCE

EPCR (LMR-42) is a rat monoclonal antibody raised against doxorubicin resistant non small lung cancer SW 1573/2R120 cells of human origin.

PRODUCT

Each vial contains 500 µl culture supernatant containing IgG_{2a} with < 0.1% sodium azide and 0.7% stabilizer protein.

APPLICATIONS

EPCR (LMR-42) is recommended for detection of EPCR of mouse, rat and human origin by immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200) and flow cytometry (10-20 µl per 1 x 10⁶ cells).

Suitable for use as control antibody for EPCR siRNA (h): sc-39932, EPCR siRNA (m): sc-39933, EPCR shRNA Plasmid (h): sc-39932-SH, EPCR shRNA Plasmid (m): sc-39933-SH, EPCR shRNA (h) Lentiviral Particles: sc-39932-V and EPCR shRNA (m) Lentiviral Particles: sc-39933-V.

Molecular Weight (predicted) of EPCR: 27 kDa.

Molecular Weight (observed) of EPCR: 32 kDa.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.