



Anti-Murine Endocan/ESM-1 Monoclonal Antibody

Clone GGR237 (Internal)

Essential Notes

Cat. Number : LIA-1101

Clone : GGR237

Concentration : 1 mg/mL

Size : 100 µg

Formulation : PBS pH 7.4

Storage : -20°C

Immunogen: Mouse recombinant endocan (chimera fused with human Fc)

Specificity : mouse and rat endocan

Source : rat

Ig isotype : IgG2a, K

Applications : IP

FOR RESEARCH USE ONLY

■ Preparation/Source

Endocan/ESM-1 is a 165 amino acid peptide that carries a dermatan sulfate chain. Anti-mouse endocan / ESM-1 monoclonal antibody clone GGR237 was produced from a hybridoma resulting from the fusion of a mouse myeloma Sp2/0 cells with B cells obtained from rat immunized with mouse recombinant endocan (chimera fused with human Fc) (Lassalle et al. 1996; Bechard et al. 2000). Antibody purification used protein G affinity chromatography.

■ Formulation

Solution in phosphate buffer saline 1x, pH 7.4

■ Concentration

The concentration of GGR237 is 1 mg/mL as determined by colorimetric protein assay.

■ Purity

Purity > 90%, as determined by SDS-PAGE and as visualized by silver staining.

■ Specificity

Specificity is determined by ability to recognize mouse and rat endocan but not to cross-react with human endocan.

■ Storage

Samples in PBS can be easily aliquoted. They can be stored frozen from -20°C to -80°C. Avoid repeated freeze-thaw cycles.

■ Applications

Immunoprecipitation (IP):

The anti-mouse endocan / ESM-1 antibody clone GGR237 is recommended for immunoprecipitation of mouse endocan. Recommended working dilutions were determined to be 5 µg/mL. Optimal dilutions should be determined according sample origins.

Other : to be determined.

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■ Bibliography related endocan

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■ Background

Endocan, also known as endothelial cell-specific molecule (ESM-1), was originally discovered by Lassalle and collaborators in endothelial cells. Structurally, endocan is a dermatan sulfate proteoglycan of 50 kDa that is freely circulating in blood. Endocan binds CD11a/CD18 integrin (also called LFA-1 for Leukocyte Function-associated Antigen-1) on human leukocytes inhibiting consequently its binding to ICAM-1 and transendothelial migration. Moreover, endocan has been recently described as a biomarker of tip cells and neoangiogenesis. The expression of endocan is upregulated by pro-inflammatory molecules such as tumor necrosis factor alpha, and pro-angiogenic molecules such as vascular endothelial growth factor and fibroblast growth factor 2. Endocan binds via its dermatan sulfate chain to hepatocyte growth factor/ scatter factor. Endocan appears as a pertinent biomarker of endothelial dysfunction.

■ Companion products

- Anti-human and mouse endocan/ESM-1 mAb (C-ter) ; clone MEP14 : [LIA-1001](#)
- Anti-mouse endocan/ESM-1 (N-ter) ; clone GGR222 : [LIA-0905](#)
- Human recombinant endocan/ESM-1 (50 kDa) : [LIP-1001](#)
- DIYEK H1 (Do It Yourself Elisa Kit for Human Endocan quantification) : [LIK-1101](#)
- JDIEK H1 (Just Do It Elisa Kit for Human Endocan quantification) : [LIK-1201](#)
- DIYEK M1 (Do It Yourself Elisa Kit for Human Endocan quantification) : [LIK-1102](#)
- DIYEK R1 (Do It Yourself Elisa Kit for Human Endocan quantification) : [LIK-1103](#)

Not intended for use as a therapeutic agents or in diagnostic procedures. Not for use in humans or animals.