Anti-human Endocan/ESM-1 monoclonal antibody

Clone MEP08 (C-Terminal)

Essential Notes

Cat. Number : LIA-0901

Clone : MEP08

Concentration : 1 mg/mL

Size : 100 µg

Formulation : PBS pH 7.4

Storage : 4°C / -20°C

Immunogen : *E. coli* derived C-Ter peptide (60-165)

Specificity : human and monkey endocan

Source : mouse

Ig isotype : IgG2a, K

Applications : IHC

Preparation/Source

Endocan/ESM-1 is a 165 amino acide peptide that carries a dermatan sulfate chain. Anti-endocan/ESM-1 antibodies clone MEP08 were produced from a hybridoma resulting from the fusion of mouse myeloma Sp2/0 cells with B cells obtained from mouse immunized with a *E. coli* derived C-terminal peptide (60-165) from recombinant human endocan. They were purified by protein A affinity chromatography.

Formulation

Solution in phosphate buffer saline 1x, pH 7.4

Concentration

The concentration of MEP08 was 1 mg/mL as determined by measurement of protein.

Purity

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

Specificity

Specificity is determined by ability to recognize **human and monkey endocan**.

Storage

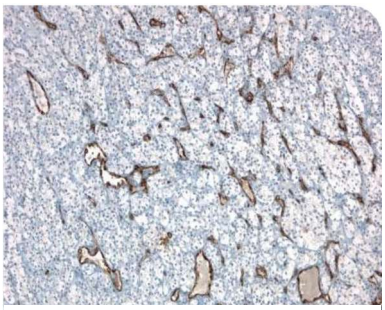
Antibody can be stored at 2°C - 8°C for 6 months without loss of activity. They can be easily aliquoted and stored frozen from -20°C to -80°C for long term storage. Avoid repeated freeze-thaw cycles.

Applications

Immunohistochemistry (IHC) :

Anti-human endocan antibody clone MEP08 is recommended to detect human endocan in paraffin-embedded tissues. Recommended working dilutions were determined to be 5 µg/ mL. Optimal dilutions should be determined according tissue origins.

Other : to be determined.



Tumor vessels expressing endocan (brown) in kidney cancers as detected by IHC using the anti-endocan/ESM-1 antibody clone MEP08.

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Bibliography related to MEP08 Antibody Applications

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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 endocan/ESM-1 mAb (C-ter) ; clone MEP14 : **LIA-1001**
- Anti-murine endocan/ESM-1 mAb (N-ter) ; clone GGR222 : **LIA-0905**
- Anti-human endocan/ESM-1 mAb (N-ter) ; clone MEP21 : **LIA-0902**
- 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**

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