

MI-DIY ELISA Kit EndoMark[®] H1

ELISA Kit to detect and quantify human endocan / ESM-1 in biological fluids

The **MI-DIYEK H1 (Microplate included Do It Yourself ELISA Kit - LIK-1201)** is an immunoassay that allows you to:

- quantify human endocan as a secreted molecule in cell culture supernatants or in body fluids
- evaluate endothelium activation during inflammatory events
- evaluate endothelium activation during neoangiogenesis
- evaluate endothelium activation in presence of pharmacological compounds

● Background : endocan / ESM-1 as a biomarker of endothelium activation

Endocan also called endothelial cell specific molecule 1 (ESM-1), is a circulating **proteoglycan** (secreted molecule) in endothelial cells (1,2,3). *In vitro*, endocan / ESM-1 is upregulated in presence of pro-angiogenic molecules such as VEGF (4,5,6,7), in presence of pro-inflammatory molecules such as TNF alpha or in presence of LPS (1,8,9). Moreover, endocan / ESM-1 was shown to bind to LFA-1 and to inhibit transendothelial migration of leucocytes during inflammation (6,8).

Blood levels of endocan / ESM-1 are increased in patients suffering from lung cancer, kidney cancer, liver cancer (5,6,7), acute myeloid leukemia and in patients suffering from sepsis (9,10). Recently, endocan has been described as a **biomarker** of tip cells during neoangiogenesis process (6) and *in vitro*, the VEGF-induced endocan secretion was shown to completely abolish in presence of anti-angiogenic drugs (5,7).

Clearly, endocan / ESM-1 appeared today as a pertinent **biomarker** of endothelial dysfunction in cancers and in diseases when endothelium gets challenged (9,11).

● MI-DIY ELISA kit EndoMark® H1 (LIK-1201) description

The human endocan / ESM-1 **MI-DIY ELISA kit EndoMark H1** contains the key components required for the detection and quantification of human endocan / ESM-1 in cell culture supernatants and in biological fluids (serum, plasma, vitreous, ascites liquid, etc).

- Reagents provided:

- one pre-coated microplate with the monoclonal antibody
- one vial with the detection antibody (monoclonal antibody against human endocan/ESM-1)
- one vial with the streptavidin
- two vials of endocan/ESM-1 standard (recombinant endocan/ESM-1)

- All reagents should be stored at 4°C

- Easy to use immunoassay / highly reproducible results in 2 hours

Main features of MI-DIYEK H1 (LIK-1201)

Catalogue No.	LIK-1201
Specificity	Human and monkey endocan / ESM-1
Analytical range	0.4 to 10 ng/mL
Sensitivity	0.2 ng/mL
Sample type	Sera, plasma, vitreous, ascites liquid, cell cultures
Sample volume	100 µL
Format	96 wells (to analyse up to 40 samples in duplicate)

● References

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This product is for research use only and is not intended for diagnostic or therapeutic use

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