### **Setting** the **standard** for **clinical** research.



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## **ENDOSTATIN ELISA**

# BIOMEDICA





#### **ELISA** for the quantitative determination of human Endostatin.

#### Endostatin - a potent angiogenesis inhibitor is

- the C-terminal proteolytic fragment of collagen XVIII, localized in the vascular basement membrane zones in various organs
- expressed during the progression of renal fibrosis in tubular cells of injured tissue
- increased in renal micro-vascular disease in late stages of patients with CKD

#### **Features & benefits**

- Wide dynamic range
- Day test results in 4 ½ hours
- Fully validated optimized for clinical samples
- Conventional ELISA Format automatisation possible

#### **Areas of interest**

- Micro-vascular injury
- Chronic kidney disease
- Atherosclerosis
- Ischemia

#### **Assay characteristics**

Method	Sandwich ELISA, 96-well strip plate, HRP/TMB
Sample type	Serum, plasma (EDTA, citrate, heparin), urine
Standard range	0-80nmol/l (= 0-1,600ng/ml)
Conversion factor	1 ng/ml = 0.05 nmol/l (MW = 20 kDa)
Sample volume	5μl neat sample
Detection limit	0.2nmol/I (0nmol/I + 3SD)
Incubation time, temp.	3h/ 1h/ 30min, room temperature
Cross reactivity	Human only, no cross-reactivity with other species

#### Literature related to CKD:

Elevated plasma levels of endostatin are associated with chronic kidney disease. *Chen J et al., Am J Nephrol, 2012; 35(4): 335-340* 

Early-onset coronary artery disease after pediatric kidney transplantation: implicating the angiogenesis inhibitor, endostatin. *Iqbal CW et al., Am Surg, 2011; 77(6): 731-735* 

Immobilized kidney 28-kDa endostatin-related (KES28kDa) fragment promotes endothelial cell survival. *Bellini MH et al., Am J Nephrol, 2010; 31(3): 255-261* 

Endostatin and angiostatin are increased in diabetic patients with coronary artery disease and associated with impaired coronary collateral formation. Sodha NR et al., Am J Physiol Heart Circ Physiol, 2009; 296: H428 - H434

A defective angiogenesis in chronic kidney disease. Futrakul N et al., Ren Fail, Jan 2008; 30(2): 215-217



## Endostatin – a potential marker for progressive microvascular renal disease in patients with chronic kidney disease.

#### **Serum and urine Endostatin values in various patient cohorts**



