ELISA PRODUCT LINE

Setting the standard for clinical research.





Divischgasse 4 · 1210 Vienna · Austria T +43 1 291 07 45 · F +43 1 291 07 85 export@bmgrp.com · www.bmgrp.com



Supplied by:



Tel: +44(0)1235 431390 sales@oxfordbiosystems.com www.oxfordbiosystems.com

ENDOTHELIN · BIG ENDOTHELIN-1 · proANP · NT-proBNP · NT-proCNP

Enzyme immunoassays for the quantitative determination of Endothelin, Big Endothelin-1, proANP, BNP Fragment, NT-proBNP and NT-proCNP in human samples.

Area of interest

- severe cardiac disease
- heart failure death
- myocardial infarction

- renal disorders
- hypertension
- transplantation

(Big) Endothelin is a potent vasoconstrictor and produced by vascular endothelial cells. Accordingly it has a wide tissue distribution. Both Big ET and ET are strong independent predictors of survival in patients with congestive heart failure, and identify a population with a very high risk of mortality. Big ET and ET are valuable parameters in the supervision and monitoring of clinical studies.

The natriuretic peptides ANP and BNP exert diuretic, natriuretic, and vasodilatory effects and thus contribute to the regulation of cardiovascular and body-fluid homeostasis and blood pressure control: These effects result from interference with the renin-angiotensin-system, endothelins, and sympathetic nervous system. ANP appears to be a cardiovascular risk factor, particularly in the context of hypertension, stroke, obesity, and metabolic syndrome. BNP is predictive of cardiac dysfunction, in particular left ventricular dysfunction, and is a useful marker of future outcomes in patients with acute coronary syndromes and congestive heart failure.

The gene encoding CNP is expressed in various tissues, with particularly high concentrations in the vascular endothelium and chondrocytes, inducing vasorelaxation and vascular remodeling, as well as regulating bone growth. The prognostic value of NT-proCNP in critically ill patients has been reported with highest levels observed in sepsis patients.

LITERATURE

Superiority of big endothelin-1 and endothelin-1 over natriuretic peptides in predicting survival in severe congestive heart failure: a 7-year follow-up study. Van Beneden R et al., J Card Fail, 2004; 10(6): 490-495

Comparison of Pleural Fluid N-Terminal Pro-Brain Natriuretic Peptide and Brain Natriuretic-32 Peptide Levels. Long AC et al., Chest, 2010; 137; 1369-1374

An Initial Characterization of N-Terminal-Proatrial Natriuretic Peptide in Serum of Sprague Dawley Rats. Colton HM et al., Toxicol Sci, 2011; 120: 262-268

Brain Natriuretic Peptide Predicts Functional Outcome in Ischemic Stroke. Rost NS et al., Stroke 2012; 43: 441-445

Depression Predicts Elevated Endothelin-1 in Patients With Coronary Artery Disease. Burg MM et al., Psychosom Med 2011: 73: 2-6

Prognostic value of circulating amino-terminal pro-C-type natriuretic peptide in critically ill patients. Koch A et al., Crit Care, 2011; 15(1); R45

High Serum Levels of Endothelin-1 Predict Severe Cerebral Edema in Patients With Acute Ischemic Stroke Treated With t-PA. Moldes O et al., Stroke, 2008; 39: 2006-2010

Urine endothelin-1 levels as a predictor of renal scarring in children with urinary tract infections. A Yilmaz A et al., Clin Nephrol, 2012; 77(3): 219-224

Assay characteristics

Samples can be measured directly in these assays without further extraction or pre-dilution steps.

proANP ELISA (BI-20892)

Method

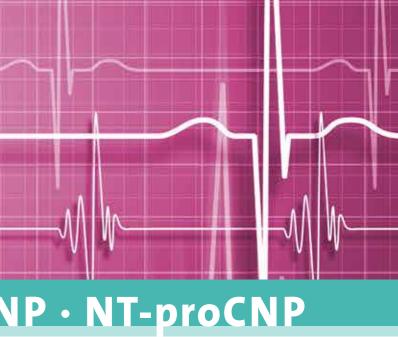
Sandwich ELISA, HRP/TMB plasma, serum, urine, cell culture Sample type supernatants (human, rodents) 10 µl / test, 12x8 tests Sample size Standard range 0 – 10 nmol/l Detection limit 0.05 nmol/l Incubation time 3 h / 30 min

BNP Fragment EIA (BI-20852W)

Method competitive EIA, HRP/TMB Sample type plasma, serum Sample size 30 µl / test, 12x8 tests Standard range 0 - 6,400 pmol/l Detection limit 130 pmol/l at 95% B/B0 Incubation time overnight / 20 min

NT-proCNP ELISA (BI-20872)

Method Sandwich ELISA, HRP/TMB Sample type plasma, serum Sample size 50 µl / test, 12x8 tests Standard range 0 – 40 pmol/l Detection limit 0.55 pmol/l Incubation time 4 h / 30 min



ENDOTHELIN ELISA (BI-20052)

Method Sandwich ELISA, HRP/TMB Sample type plasma, serum, urine, cell culture supernatants, saliva 50 µl / test, 12x8 tests Sample size Standard range 0 – 10 fmol/ml Detection limit 0.02 fmol/ml Incubation time overnight / 1 h / 30 min

BIG ENDOTHELIN-1 ELISA (BI-20082H)

Method Sandwich ELISA, HRP/TMB Sample type plasma, serum Sample size 50 µl / test, 12x8 tests Standard range 0 – 3 pmol/l Detection limit 0.01 pmol/l Incubation time 4 h / 1 h / 30 min

NT-proBNP ELISA (SK-1204)*

Method Sandwich ELISA, HRP/TMB Sample type plasma, serum Sample size 50 µl / test, 12x8 tests Standard range 0 - 640 pmol/l Detection limit 3 pmol/l Incubation time 3 h / 30 min

* For local availability of NT-proBNP ELISA please contact your distributor.