

THE NEW GENERATION!

FAST TRACK *PLASMA METANEPHRINES*

ELISA AND RIA *BASED ON EXTRACTION*

ADVANTAGES

- First fully automated Metanephrines-ELISA worldwide; completely validated on the Gemini analyzer^{*)}
- Results with ELISA within the same day (RIA overnight)
- Most sophisticated sample preparation: extraction of samples on a 96 micro well plate
- Speed and ease of use
- 48 duplicate determinations or 96 single
- No known interferences or crossreactivities by medical drugs
- Highly correlated to LC-MS/MS
- Wide standard ranges, convenient measurement of pathological samples without predilution
- Specific for the biologically relevant L-normetanephrine / L-metanephrine
- Most suitable assay for diagnosing pheochromocytoma and related neuroendocrine tumours

^{*)} *The Gemini analyzer is a compact microplate processor, produced by STRATEC AG, Germany*

LC-MS/MS COMPARISON (PLASMA)

Plasma samples were assayed with the ELISA and each Fast Track assay demonstrated an excellent correlation to the LC-MS/MS methodology:

Metanephrine:

$$\text{LC-MS/MS} = 0.91x + 1.8$$

$$R^2 = 0.96$$

Normetanephrine:

$$\text{LC-MS/MS} = 0.93x + 13$$

$$R^2 = 0.99$$

PLASMA METANEPHRINES

ESSENTIAL INFORMATION

Cells derived from neuroendocrine tumours (e.g. pheochromocytoma) are known to produce catecholamines which are secreted episodically via vesicles into the blood stream. But beside this a small portion of the catecholamines is metabolized inside the cells to the corresponding catecholamines metabolites – namely metanephrine, normetanephrine and 3-methoxytyramine – which are secreted at low levels continuously into the blood stream. Recent studies and publications have shown that the quantification of these plasma free metanephrine (fMN) and plasma free normetanephrine (fNMN) is the most accurate biochemical marker for the clinical diagnosis of pheochromocytoma and follow-up of pheochromocytoma patients. These assays represent a quantum leap in speed and usability. They are faster and more cost effective than any technology we've come across including HPLC and LC/MS. They allow for the simultaneous determination of metanephrine and normetanephrine in plasma from just 200 µl. And most important: the ELISA is the first immunoassay worldwide which offers a completely automated solution.

PLASMA FREE METANEPHRINES ELISA



Enzyme Immunoassay for the fast and quantitative determination of the respective analyte in plasma. Fully automated method available.



Common sample preparation. Acylation in liquid phase. 6 standards (do not change from lot to lot), 2 controls, ready for use.



Time: sample preparation 2 h 20 min. and ELISA overnight (or 3 h 15 min)



EDTA- and heparin- plasma.

PLASMA FREE METANEPHRINES RIA



Radioimmunoassay for the fast and quantitative determination of the respective analyte in plasma.



Common sample preparation. Acylation in liquid phase. 6 standards (do not change from lot to lot), 2 controls, ready for use.



Time: sample preparation 2h 20 min. and RIA overnight



EDTA- and heparin- plasma.

KIT DETAILS ELISA – TECHNICAL DATA

CAT NO.	PARAMETERS	SAMPLE	STANDARDS	SENSITIVITY	FORMAT
BA E-8300	Metanephrine / Normetanephrine	200 µl	Meta: 0/36 - 3600 pg/ml Normeta: 0/72 - 7200 pg/ml	14.9 pg/ml 17.9 pg/ml	2 x 96 wells
BA E-8100	Metanephrine	200 µl	0/36 - 3600 pg/ml	14.9 pg/ml	96 wells
BA E-8200	Normetanephrine	200 µl	0/72 - 7200 pg/ml	17.9 pg/ml	96 wells

KIT DETAILS RIA – TECHNICAL DATA

CAT NO.	PARAMETERS	SAMPLE	STANDARDS	SENSITIVITY	FORMAT
BA R-8300	Metanephrine / Normetanephrine	200 µl	Meta: 0/36 - 3600 pg/ml Normeta: 0/72 - 7200 pg/ml	5.8 pg/ml 21.4 pg/ml	2 x 100 tubes
BA R-8100	Metanephrine	200 µl	0/36 - 3600 pg/ml	5.8 pg/ml	100 tubes
BA R-8200	Normetanephrine	200 µl	0/72 - 7200 pg/ml	21.4 pg/ml	100 tubes