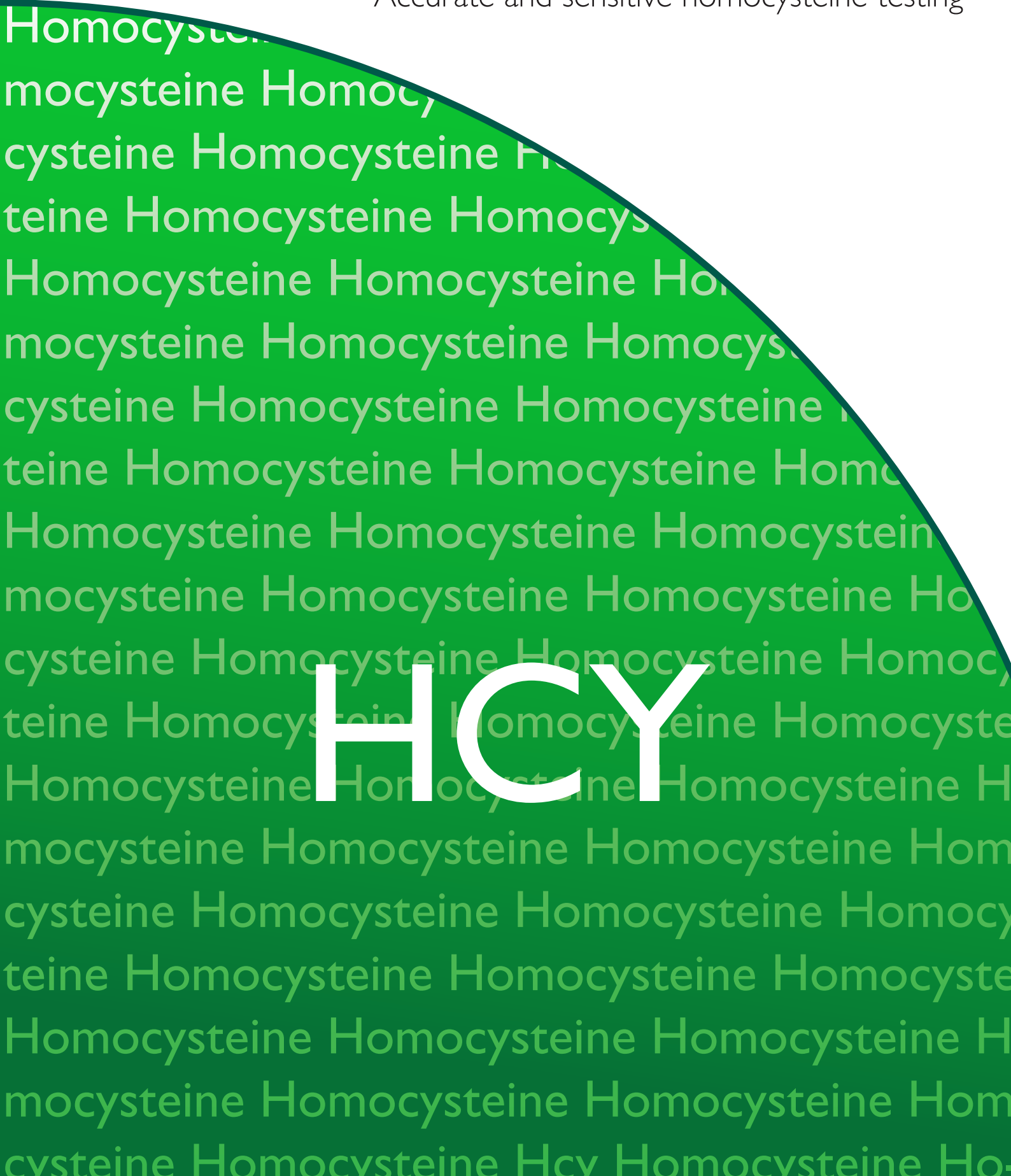




RANDOX

Homocysteine

Accurate and sensitive homocysteine testing



Homocysteine

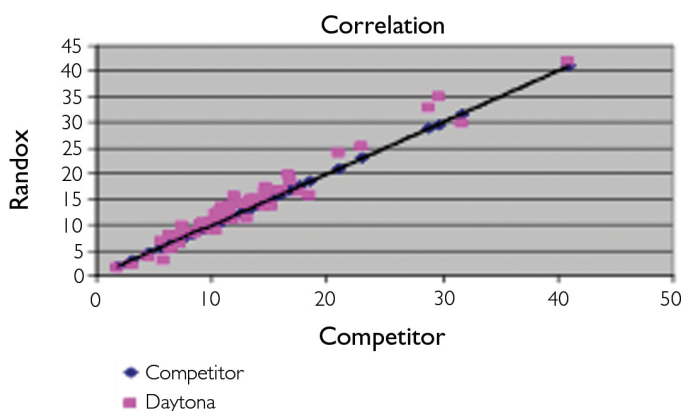
Accurate and sensitive homocysteine testing

What is homocysteine?

Homocysteine (HCY) is a thiol-containing amino acid produced by the intracellular demethylation of methionine. It is exported into plasma where it circulates, mostly in its oxidised form bound to plasma proteins as a protein-HCY mixed disulphide with albumin.

Clinical Significance

- Elevated levels of homocysteine have been linked to various disease states including cardiovascular disease, diabetes, dementia, Alzheimer's disease and complications during pregnancy
- Extremely high levels are found in patients with homocystinuria, a rare genetic disorder of the enzymes involved in the metabolism of homocysteine
- Individuals with homocystinuria suffer from early arteriosclerosis, mental retardation and arterial and venous thromboembolism
- Elevated levels of homocysteine (Hyperhomocysteinemia) are associated with increased levels of CVD. Patients with chronic renal disease experience excess mortality due to atherosclerotic CVD. Increased levels of homocysteine are often found in these patients
- Elevated levels of homocysteine are also implicated in miscarriages and birth defects



High Quality Performance

- **Convenient two part liquid ready-to-use reagent kit** - maximising the space available within your analyser
- **Two levels of Standards included within the kit** - simplifying the ordering process
- **Wide measuring range** - 1.7 - 47.9 $\mu\text{mol/L}$. The normal range for homocysteine is 5-20 $\mu\text{mol/L}$ therefore the Randox assay is capable of detecting abnormal levels of homocysteine within a sample
- **Excellent sensitivity** - 1.7 $\mu\text{mol/L}$, which is important in measuring seriously depleted levels of homocysteine. Homocysteine is necessary for the production of proteins and tissues within the body and if levels are too low this will be affected
- **Stable on-board the analyser for 28 days at +10°C** - minimising reagent waste
- **Limited interference from bilirubin, haemoglobin, intralipid and triglycerides** - producing more accurate and precise results
- **Suitable for both human serum and plasma (Li Hep or K EDTA) samples**
- **Enzymatic method**
- **Standardised to NIST SRM 1955 (Homocysteine Standard Reference Material)** - shows excellent correlation with industry comparative methods
- **Precision (RX series)** - % CV's of less than 10% obtained for within-run and total precision

DESCRIPTION	SIZE	CAT. NO.
Homocysteine	R1 2 x 21.7 ml	HY4036
	R2 2 x 4.6 ml	

Randox Cardiac Controls and Calibrators available

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