

MRX D-DIMER



D-dimer is a key indicator of thrombotic events such as deep venous thrombosis (DVT), pulmonary embolism (PE) and disseminated intravascular coagulation (DIC). The D-Dimer assay is used to help rule out DVT or PE and to monitor therapy in DIC. The reaction is obtained through latex particles coated with a monoclonal antibody directed against D-dimer. In the presence of D-dimer the latex particles will aggregate and an optical or a viscosity change can be measured depending on the instrument technology.

A challenge in standardising D-dimer reporting has been that manufacturers of instruments have developed reagents based on a unique series of monoclonal antibodies. This has led to a variation in results between instruments, and besides the risk of confusion regarding patient results it complicates all forms of external control programs. Medirox series of D-Dimer reagents are unique to share one monoclonal antibody for all reagents. With the same antibody the reagents can be used on most reading devices, and can be jointly calibrated.

Medirox has developed three different product designs of D-Dimer to suit different measuring instruments. For instruments operating in the blue wavelength range (400-600 nm) Medirox offers MRX147 and MRX147B. MRX147 consists of a higher latex concentration optimised for instruments equipped with micro sized cuvettes (2-6 mm) and thus having a shorter beam path. MRX147B consists of a lower latex concentration optimised for instruments equipped with wider cuvettes (6-10 mm) and thus having a longer beam path. For instruments operating in the red wavelength range (600-800 nm) Medirox offers MRX143.

- » Latex immunoassay
- » Liquid components, ready to use
- » Adoptable to most 400-800 nm measuring instruments
- » Excellent correlation between 405 nm/660 nm/800 nm methods
- » High sensitivity, low cut-off value (200 ng/mL) for a high exclusion rate of DVT and PE

DETAILS & TYPICAL DATA

Product form:	Liquid components
Origin:	Monoclonal antibodies
Additional products needed:	<ul style="list-style-type: none"> • Eximius Control Basic or Plus (L1/L2/L3) (MRX170-MRX173, MRX180-MRX183) • Scandinavian Multi or Multi Plus Controls (L1/L2) (GHI162/GHI167B, GHI164/GHI170) • D-Dimer Calibrator (MRX144) • Sample Diluent (0,9 % NaCl) (MRX184) for calibrator dilutions

Parameters:	MRX147/MRX147B	MRX143
Wavelength:	400-600 nm	600-800 nm
Sensitivity:	99 % NPV using 200 ng/mL cut off	98 % NPV using 200 ng/mL cut off
Hook effect:	No Hook effect <100 000 ng/mL	No Hook effect <130 000 ng/mL
Dynamic range:	41,3 - 1000 000 pg/mL	41,3 - 1000 000 pg/mL
Specificity:	>100-fold specificity for D-dimer (fibrin or purified D-dimer), over fibrinogen, fibrinogen D or fragment E	>100-fold specificity for D-dimer (fibrin or purified D-dimer), over fibrinogen, fibrinogen D or fragment E
No interference with:	UF and LMWH <100 U/mL, Bilirubin < 0,1 g/L, Triglycerides <2,5 g/L, Hemoglobin <4 g/L	UF and LMWH <100 U/mL, Bilirubin <0,5 g/L, Triglycerides <20 g/L, Hemoglobin <10 g/L

STABILITY & STORAGE

Parameter:	MRX147/MRX147B	MRX143
Storage:	2-8 °C	2-8 °C
Shelf-life:	18 months at 2-8 °C	18 months at 2-8 °C
Open-vial stability:	4 weeks at 2-25 °C	4 weeks at 2-25 °C

ORDERING INFORMATION

Reference number	Product description	Size
MRX147	MRX D-Dimer (latex + reaction buffer)	5x3 mL + 5x7 mL
MRX147B	MRX D-Dimer (latex diluted + reaction buffer)	5x6 mL + 5x7 mL
MRX143	MRX D-Dimer (latex + reaction buffer)	5x4 mL + 5x7 mL
MRX170	Eximius Control Basic (L1+L2+L3)	4+4+2x1 mL
MRX171/172/173	Eximius Control Basic (L1/L2/L3)	10x1 mL pack per level
MRX180	Eximius Control Plus (L1+L2+L3)	4+4+2x1 mL
MRX181/182/183	Eximius Control Plus (L1/L2/L3)	10x1 mL pack per level
GHI162/167B	Scandinavian Multi Control (L1/L2)	10x1 mL pack per level
GHI164/170	Scandinavian Multi Plus Control (L1/L2)	10x1 mL pack per level
MRX144	D-Dimer Calibrator	1x1 mL
MRX184	Sample Diluent (0,9 % NaCl)	10x8 mL