

Product specifications

Name	Anti-h MPO 1701 SPTN-5
Specificity	Antibody recognizes human myeloperoxidase
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components
Product code	100266
Product buffer solution	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN ₃ as a preservative
Shelf life and storage	36 months from manufacturing at 2–8 °C
Subclass	IgG ₁
Analyte description	Myeloperoxidase (MPO) is a peroxidase enzyme (EC 1.11.1.7) most abundantly present in neutrophil granulocytes. The 150-kDa MPO is a dimer consisting of two 15-kDa light chains and two variable-weight glycosylated heavy chains bound to a prosthetic heme group. Myeloperoxidase (MPO) is an enzymatic mediator of several inflammatory cascades and higher serum levels have been associated with increased risk of adverse cardiovascular events. As a result, MPO and its downstream inflammatory pathways represent attractive targets for both prognostic and therapeutic intervention in the prophylaxis of atherosclerotic cardiovascular disease.

Parameters tested on each lot

Product appearance	Liquid, may turn slightly opaque during storage
Product concentration	5.0 mg/ml (+/- 10 %)
Immunoreactivity	80–120 % compared to the reference sample in an FIA test
IEF Profile	6.0–6.8
Purity	≥ 95 %

Kinetic parameters

Association rate constant	1×10^6 1/Ms
Dissociation rate constant	1×10^{-3} 1/s
Affinity constant	$K_D = 1 \times 10^{-9}$ M; $K_A = 1 \times 10^9$ 1/M
Determination method	SPR analysis (ProteOn XPR36)
Determination antigen	Myeloperoxidase, Lee Biosolutions (Cat 426-10, Lot L44340)

Cross-reactivities Not Determined (N/D)

Epitope N/D

Pair recommendations

		DETECTION		
		1701	1702	1703
CAPTURE	1701	-	+	+
	1702	-	-	+
	1703	+	+	-

Please note that pair recommendations are based on results obtained by our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations are only indicative.

Platforms tested FIA

Antigens tested Native MPO antigen Lee Biosolutions 426-10.

TEMPERATURE, TIME	RESULT
-70 °C, 21 days	Precipitation observed
-20 °C, 21 days	Precipitation observed
+4 °C, 21 days	OK
+25 °C, 21 days	OK
+35 °C, 21 days	OK
+45 °C, 7 days	OK

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody. Please note that the shelf life given on the first page is based on real time stability testing at 2–8 °C in the product buffer.

Miscellaneous -

References -

