

## Product specifications

Name	Anti-h D-Dimer 1405 SPTN-5
Specificity	Antibody recognizes human D-dimer
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product code	100480
Product buffer solution	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative
Shelf life and storage	36 months from manufacturing at 2–8 °C
Subclass	IgG <sub>1</sub>
Analyte description	D-dimer (DD) is a fibrin degradation product created during fibrinolysis when plasmin degrades the fibrin clot. In clinical diagnostics, D-dimer test can be used to exclude deep venous thrombosis (DVT), pulmonary embolism (PE) or disseminated intravascular coagulation (DIC). D-dimer is also valuable for monitoring patients during and after anticoagulant treatment for recurrent DVT.

## 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	6.2–7.2
Purity	≥ 95 %

## Kinetic parameters

Association rate constant	3.5 x 10 <sup>5</sup> 1/Ms	2.8 x 10 <sup>5</sup> 1/Ms
Dissociation rate constant	Does not dissociate	8.4 x 10 <sup>-5</sup> 1/s
Affinity constant	K <sub>A</sub> = Not Applicable (N/A) K <sub>D</sub> = Not Applicable (N/A)	K <sub>A</sub> = 3.4 x 10 <sup>8</sup> 1/M K <sub>D</sub> = 3.4 x 10 <sup>-9</sup> M (= 3.4 nM)
Determination method	SPR (ProteOn XPR36)	BLI (Octet RED96e)
Determination antigen	FDP-D-Dimer, Chrystal Chem Inc.	D-Dimer (native), Lee Biosolutions (Cat 200-09)

Cross-reactivities Does not recognize human fibrinogen

Epitope Not Determined (N/D)

Pair recommendations

		DETECTION							
		1401	1402	1403	1404	1405	1407	1408	1409
CAPTURE	1401	-	-	+	+	+	+	+	+
	1402	-	-	-	+	-	-	-	-
	1403	-	-	-	+	-	-	-	-
	1404	-	+	+	-	+	-	-	-
	1405	+	+	+	+	-	+	+	-
	1407	+	+	-	-	-	-	-	-
	1408	+	+	+	-	-	+	-	+
	1409	+	-	-	-	-	-	+	-

Following pairs are especially recommended for the below mentioned assays:

FIA: 1408 (capture) – 1409 (detection), 1409 – 1408, 1401 – 1408, 1401 – 1409, and 1408 – 1401

IT: 1403 – 1404 and 1404 – 1407

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, IT

Antigens tested Native D-Dimer, Lee Biosolutions (Cat. 200-09, 200-12 and 200-13).

Product stability	TEMPERATURE, TIME	RESULT
	-70 °C, 21 days	OK
	-20 °C, 21 days	OK
	+4 °C, 21 days	OK
	+35 °C, 7 days	OK
	+35 °C, 21 days	Minor charge alterations
	+45 °C, 3 days	OK
	+45 °C, 7 days	Minor charge alterations

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 -

