

Product specifications

Name	Anti-h Calprotectin 3403 SPTN-5
Specificity	Antibody recognizes calprotectin S100A9 subunit
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product code	100460
Product buffer solution	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN ₃ as a preservative
Shelf life and storage	12 months from manufacturing at 2–8 °C
Subclass	IgG _{2a}
Analyte description	Calprotectin belongs to the family of S100 proteins and is composed of two subunits S100A8 and S100A9. Increased plasma concentrations are found in response to infections and inflammation. Faecal calprotectin measurement is used for detection of gastrointestinal inflammation or neoplasia and for assessment of inflammatory bowel disease activity and response to treatment. S100A9, also known as calgranulin B, is upregulated in various cancer types including breast, prostate, lung, and colorectal cancers as well.

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	7.2–8.7
Purity	≥ 95 %

Kinetic parameters

Association rate constant	1.9×10^6 1/Ms
Dissociation rate constant	9.1×10^{-4} 1/s
Affinity constant	$K_A = 2.1 \times 10^9$ 1/M; $K_D = 4.8 \times 10^{-10}$ M (= 0.48 nM)
Determination method	SPR analysis (ProteOn XPR36)
Determination antigen	Recombinant human calprotectin, Certest Biotech (Cat MT25HCP)



Cross-reactivities Not determined (N/D)

Epitope N/D

Pair recommendations

		DETECTION				
		3403	3404	3405	3406	3407
CAPTURE	3403	-	+	+	+	+
	3404	+	+	+	+	+
	3405	+	+	-	-	+
	3406	+	+	+	-	+
	3407	+	+	+	+	+

Antibody 3403 is recommended as a pair with itself for detection of S100A9 homodimer (calgranulin B).

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, LF

Antigens tested Recombinant Calprotectin S100A8/S100A9 antigen, Medix Biochemica 610061, and recombinant Calprotectin S100A9 antigen, Medix Biochemica 710019, 710037 and 710036.

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	Reduced immunoreactivity
+45 °C, 3 days	Reduced immunoreactivity

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 -

