

Product specifications

Name	Anti-h SAA 2201 SPTN-5
Specificity	Antibody recognizes human serum amyloid A (SAA)
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product code	100279
Product buffer solution	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN ₃ as a preservative
Shelf life and storage	18 months from manufacturing at 2–8 °C
Subclass	IgG _{2a}
Analyte description	Serum amyloid A, a family of apolipoproteins, is associated with high density lipoprotein during inflammatory states. The level of serum amyloid A (SAA) in the blood increases dramatically in response to tissue injury and inflammation. SAA also acts as a cytokine, influencing cell adhesion, migration, proliferation and aggregation. SAAs are implicated in several chronic inflammatory diseases, such as amyloidosis, atherosclerosis, and rheumatoid arthritis.

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	7.4–8.8
Purity	≥ 95 %

Kinetic parameters

Association rate constant	1.9 x 10 ⁵ 1/Ms	2.4 x 10 ⁶ 1/Ms
Dissociation rate constant	1.8 x 10 ⁻⁴ 1/s	3.4 x 10 ⁻⁵ 1/s
Affinity constant	K _A = 1.0 x 10 ⁹ 1/M K _D = 9.6 x 10 ⁻¹⁰ M (= 1.0 nM)	K _A = 7.0 x 10 ¹⁰ 1/M K _D = 1.4 x 10 ⁻¹¹ M (= 0.01 nM)
Determination method	SPR (ProteOn XPR36)	BLI (Octet RED96e)
Determination antigen	SAA, Santa Cruz Biotechnology (Cat sc-4870, Lot A0308)	Recombinant SAA, Medix Biochemica (Cat 610070)

Cross-reactivities

Recognizes human SAA1, human SAA2, feline, canine and equine SAA.
Does not recognize human SAA4 or bovine SAA.

Epitope

Conformational

Pair recommendations

		DETECTION							
		2201/ RC2201	2203	2205	2208	2209	2211	2212	2213
CAPTURE	2201/ RC2201	-	+	+	-	-	+	-	-
	2203	+	-	+	-	+	+	-	+
	2205	-	-	-	-	-	+	+	-
	2208	-	-	-	-	-	-	+	-
	2209	-	+	-	-	-	+	-	-
	2211	+	-	-	-	+	-	-	-
	2212	-	-	+	+	-	-	-	-
	2213	-	-	-	-	-	-	-	-

Following pairs are especially recommended for the below mentioned assays:

FIA: 2205 (capture) – 2212 (detection), 2208 – 2212

LF: 2201 (membrane) – 2203 (particles), 2203 – 2201

IT: 2201 – 2211, 2201 – 2203, 2209 – 2211

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, IT

Antigens tested

Native human SAA, EastCoast Bio (Cat LA449), recombinant human SAA, Medix Biochemica (Cat 610070) and Lee Biosolutions (Cat 527-18).

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

-