

## Product specifications

Name	Anti-h KIM-1 10101 SPTN-5
Specificity	Antibody recognizes human kidney injury molecule 1
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components
Product code	100738
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	Unspecified, storage at 2–8 °C
Subclass	IgG <sub>1</sub>
Analyte description	Kidney injury molecule 1 (KIM-1), also known as T-cell immunoglobulin mucin receptor 1 (TIM-1) or Hepatitis A virus cellular receptor 1 (HAVcr-1) is a type I transmembrane protein expressed in the renal tubular cells. KIM-1 is released after tubular injury and can be used in the diagnosis of acute kidney injury (AKI).

## 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	6.2–6.8
Purity	≥ 95 %

## Kinetic parameters

Association rate constant	$4.5 \times 10^5$ 1/Ms
Dissociation rate constant	$2.9 \times 10^{-4}$ 1/s
Affinity constant	$K_A = 1.6 \times 10^9$ 1/M $K_D = 6.7 \times 10^{-10}$ M (= 0.67 nM)
Determination method	BLI (Octet RED96e)
Determination antigen	Human TIM-1/KIM-1, Acro Biosystems (Cat KI1-H52H3)

#### Cross-reactivities

Recognizes TIM-3/HAVcr-2/KIM-3. Does not recognize TIM-4/TIMD-4.

#### Epitope

N/D

#### Pair recommendations

		DETECTION			
		10101	10102	10103	10106
CAPTURE	10101	-	-	-	-
	10102	+	-	-	-
	10103	+	-	-	-
	10106	+	-	-	-

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

N/D

#### 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	Minor charge alterations
+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

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#### References

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