

## Product specification ANTIBODY

2024-04-29

### Anti-h KIM-1 10101 SPTN-5

### **Product overview**

Catalog number 100738

Specificity Antibody recognizes human kidney injury molecule 1

**Description** Monoclonal mouse antibody, cultured *in vitro* under conditions free from

animal-derived components.

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 x 10<sup>5</sup> 1/Ms

**Dissociation rate constant** 2.9 x 10<sup>-4</sup> 1/s

**Affinity constant**  $K_A = 1.6 \times 10^9 \text{ 1/M}$ 

 $K_D = 6.7 \times 10^{-10} M (= 0.67 nM)$ 

**Determination method** BLI (Octet RED96e)

**Determination antigen** Human TIM-1/KIM-1, Acro Biosystems (Cat KI1-H52H3)





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

**Epitope** Not determined (N/D)

Pair recommendations

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

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 -

References -

