

## Anti-h Tau R13301 SPTN-5

### Product overview

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<b>Catalog number</b>	140038
<b>Specificity</b>	Antibody recognizes human total Tau
<b>Description</b>	Recombinant mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
<b>Product buffer solution</b>	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative
<b>Shelf life and storage</b>	Unspecified, storage at 2–8 °C
<b>Subclass</b>	IgG <sub>1</sub>
<b>Analyte description</b>	Tau is an intracellular protein localized in the axons of neurons, where it maintains the stability of microtubules. Six different isoforms are found in the central nervous system and can be detected from CSF. Increased soluble total Tau can be used as an indicator of neuronal damage for example in traumatic brain injury and in neurodegenerative pathologies such as Alzheimer's disease.

### Parameters tested on each lot

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<b>Product appearance</b>	Light-yellow liquid, may turn slightly opaque during storage
<b>Product concentration</b>	5.0 mg/ml (+/- 10 %) (A280 nm, 1 mg/ml, 1 cm = 1.6)
<b>Immunoreactivity</b>	80–120 % compared to the reference sample in an FIA test
<b>IEF Profile</b>	6.0–6.9
<b>Purity</b>	≥ 95 %

### Kinetic parameters

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<b>Association rate constant</b>	$5.1 \times 10^5$ 1/Ms
<b>Dissociation rate constant</b>	$3.1 \times 10^{-5}$ 1/s
<b>Affinity constant</b>	$K_A = 1.6 \times 10^{10}$ 1/M; $K_D = 5.6 \times 10^{-11}$ M (= 0.056 nM)
<b>Determination method</b>	BLI analysis (Octet RED96e)
<b>Determination antigen</b>	Recombinant Tau-441, rPeptide (cat T-1001-1)



#### Legal disclaimer

**Cross-reactivities** N/D

**Epitope** A non-phosphorylated epitope within the overlapping area of the six different CNS Tau variants (352-441 amino acids long)

**Pair recommendations**

		DETECTION		
		R13301	R13302	R13303
CAPTURE	R13301 (t-Tau)	-	+	+
	R13302 (t-Tau)	+	-	+
	R13303 (t-Tau)	+	+	-
	R13321 (p-Tau181)	+	+	+
	R13322 (p-Tau231)	+	+	+
	R13323 (p-Tau217)	+	+	+

Following pair is especially recommended for FIA assay:  
R13301 (capture) – R13302 (detection)

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, 21 days	Charge alterations
	+45 °C, 3 days	OK
	+45 °C, 7 days	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** -



**Legal disclaimer**