

Anti-h Tau R13301 SPTN-5

Product overview

Catalog number	140038
Specificity	Antibody recognizes human total Tau
Description	Recombinant mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product buffer solution	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN ₃ as a preservative
Shelf life and storage	Unspecified, storage at 2–8 °C
Subclass	IgG ₁
Analyte description	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

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

Kinetic parameters

Association rate constant	5.1×10^5 1/Ms
Dissociation rate constant	3.1×10^{-5} 1/s
Affinity constant	$K_A = 1.6 \times 10^{10}$ 1/M; $K_D = 5.6 \times 10^{-11}$ M (= 0.056 nM)
Determination method	BLI analysis (Octet RED96e)
Determination antigen	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)	+	+	+

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

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 -



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