

Product specification ANTIBODY

2023-10-23

Anti-h Tau R13302 SPTN-5

Product overview

Catalog number 140039

Specificity Antibody recognizes human total Tau

Description Recombinant 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 % NaN₃ as a preservative

Shelf life and storage Unspecified, storage at 2–8 °C

 $\begin{tabular}{l} Subclass & IgG_1 \end{tabular}$

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 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 5.8–6.5

Purity ≥ 95 %

Kinetic parameters

Association rate constant 8.9 x 10⁵ 1/Ms

Dissociation rate constant 2.9 x 10⁻⁵ 1/s

Affinity constant $K_A = 3.1 \times 10^{10} \text{ 1/M}; K_D = 4.4 \times 10^{-11} \text{ M} (= 0.044 \text{ nM})$

Determination method BLI analysis (Octet RED96e)

Determination antigen Recombinant Tau-441, rPeptide (cat T-1001-1)





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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

Product stability TEMPERATURE, TIME RESULT

-70 °C, 21 days OK
-20 °C, 21 days OK
+4 °C, 21 days OK
+35 °C, 21 days OK
+45 °C, 7 days OK

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 Comparable to mAb clone HT7

References -

