

Product specification ANTIBODY

2024-05-13

Anti-h p-Tau217 R13323 SPTN-5

Product overview

Catalog number 140050

Specificity Antibody recognizes human Tau phosphorylated at Thr217

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. Tau bears several potential phosphorylation sites, and Tau phosphorylated at threonine 217 has been linked to neurodegenerative diseases 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 7.2–8.2

Purity ≥ 95 %

Kinetic parameters

Association rate constant 5.2 x 10⁵ 1/Ms

Dissociation rate constant 2.7 x 10⁻⁴ 1/s

Affinity constant $K_A = 1.9 \times 10^9 \text{ 1/M}; K_D = 6.3 \times 10^{-10} \text{ M} (= 0.63 \text{ nM})$

Determination method BLI (Octet RED96e)

Determination antigen TPSLP{pTHR}PPTRE, Genscript





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Cross-reactivities No cross-reactivity to linear peptides:

- PPAPK{pTHR}PPSSG (p-Tau181)

KKVAVVR{pTHR}PPKSP (p-Tau231)

Epitope Epitope region (where phosphorylation is necessary):

TPSLP{pTHR}PPTRE

Pair recommendations

	DETECTION		
	R13301	R13302	R13303
CAPTURE R13323 (p-Tau217)	+	+	+

Following pair is especially recommended for FIA assay:

R13323 (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, 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 -

