

Anti-h p-Tau231 R13322 SPTN-5

Product overview

Catalog number	140036
Specificity	Antibody recognizes human Tau phosphorylated at Thr231
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. Tau bears several potential phosphorylation sites, and Tau phosphorylated at threonine 231 has been linked to neurodegenerative diseases 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 = 1.5)
Immunoreactivity	80–120 % compared to the reference sample in an FIA test
IEF Profile	6.5–7.1
Purity	≥ 95 %

Kinetic parameters

Association rate constant	2.9×10^6 1/Ms
Dissociation rate constant	7.7×10^{-4} 1/s
Affinity constant	$K_A = 3.8 \times 10^9$ 1/M; $K_D = 3.9 \times 10^{-10}$ M (= 0.39 nM)
Determination method	BLI analysis (Octet RED96e)
Determination antigen	KKVAVVR{pTHR}PPKSP, Genscript



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Cross-reactivities	No cross reactivity to linear peptides: <ul style="list-style-type: none">- PPAPK{pTHR}PPSSG (p-Tau181)- TPSLP{pTHR}PPTRE (p-Tau217)													
Epitope	Epitope region (where phosphorylation is necessary): KKVAVVR{pTHR}PPKSP													
Pair recommendations	R13322 can be paired with tot-Tau detectors R13301, R13302 and R13303.													
Platforms tested	N/A													
Antigens tested	N/D													
Product stability	<table><thead><tr><th>TEMPERATURE, TIME</th><th>RESULT</th></tr></thead><tbody><tr><td>-70 °C, 21 days</td><td>OK</td></tr><tr><td>-20 °C, 21 days</td><td>OK</td></tr><tr><td>+4 °C, 21 days</td><td>OK</td></tr><tr><td>+35 °C, 21 days</td><td>Charge alterations</td></tr><tr><td>+45 °C, 7 days</td><td>Charge alterations</td></tr></tbody></table> <p>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.</p>	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	
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Miscellaneous	Comparable to mAb clone PHF-6													
References	-													



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