

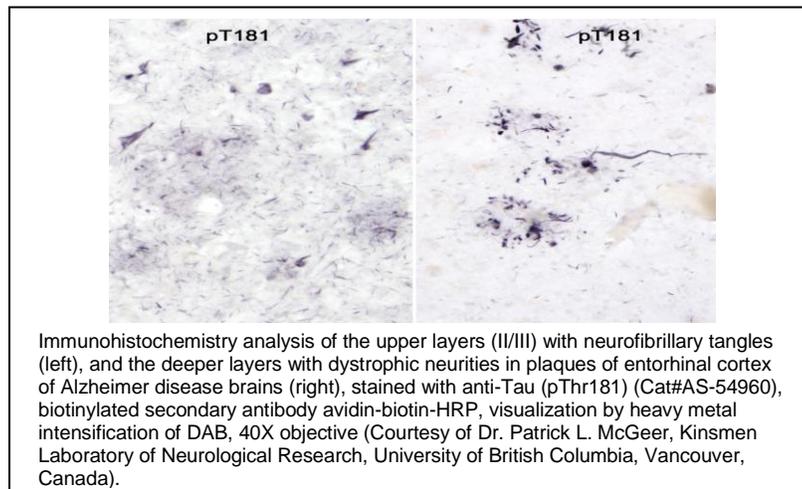


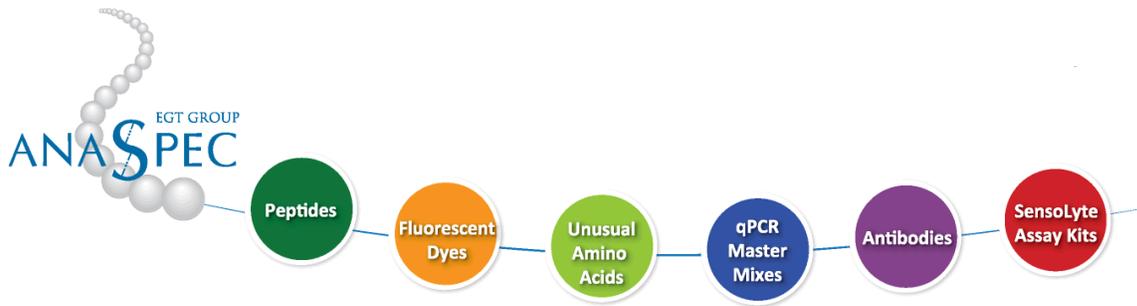
Update: July, 2017

## Product Data Sheet

<b>Product Name:</b>	Anti-Tau (pThr181) <i>Rabbit Polyclonal Antibody</i>
<b>Catalog Number:</b>	AS-54960
<b>Lot Number:</b>	See label on vial
<b>Storage Buffer:</b>	1X PBS (pH 7.4) containing 0.05% sodium azide and < 0.1% BSA
<b>Size:</b>	50 µg
<b>Concentration:</b>	0.2 mg/mL
<b>Immunogen:</b>	KLH conjugated with synthetic peptides corresponding to human Tau at the phosphorylated Threonine 181 region
<b>Species Reactivity:</b>	Species reactivity includes human and primate while others remain unknown. The antibody was evaluated for specificity by dot blot and immunohistochemistry.
<b>Application Notes:</b>	The following concentration ranges are recommended starting points for this product. Optimal working concentrations should be determined by the investigator for specific applications.

ELISA for immunizing peptide:	0.1-1.0 µg/mL
Western blot:	0.5-2.0 µg/mL
Immunohistochemistry:	10.0-20.0 µg/mL





**Background:**

Tau is a collection of microtubule-associated proteins that is involved in microtubule assembly and stabilization.<sup>1</sup> In adult human brain, 6 isoforms, ranging between 352 and 441 amino acids in length, are produced as a result of alternative RNA splicing.<sup>2,3</sup> The expression of tau isoforms is developmentally regulated, as only the smallest tau polypeptide is expressed in the fetal brain. Hyperphosphorylated Tau is the major component of the paired helical filament of Alzheimer's disease. Anti-phosphor-Tau antibodies are used to identify specific amino acids that are phosphorylated in Tau from normal brains and Alzheimer's disease brains. The Tau proteins, especially in developing brains and in Alzheimer brains, can be found to be phosphorylated *in vivo* at many different sites.<sup>4</sup>

**Storage:**

Store at 4°C for 1-2 weeks. Aliquot and store at -20°C up to 1 year. Avoid freeze and thaw cycle.

**References:**

1. Cleveland DW, et al (1977) *J Mol Biol* **116**, 207-225
2. Goedert M, et al (1989) *Neuron* **3**, 519-526.
3. Geodert M, et al (1989) *EMBO J* **8**, 393-399.
4. Billingsley M, et al (1997) *Biochem J* **323**, 577-591.

This product is for *in vitro* research use only.