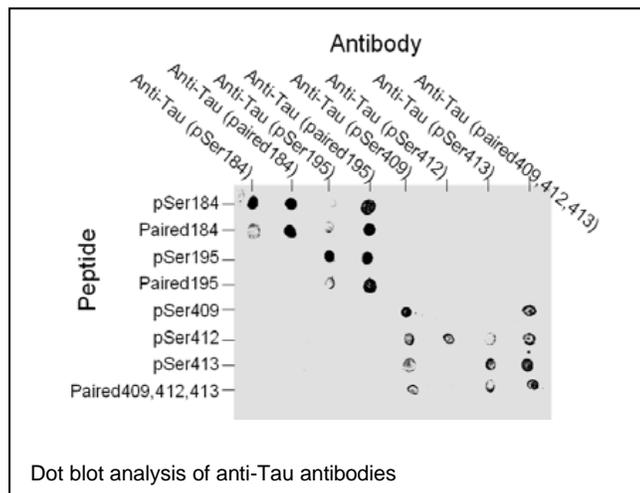


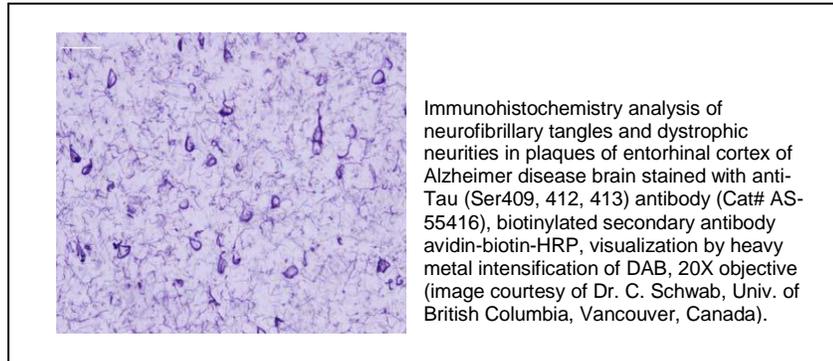
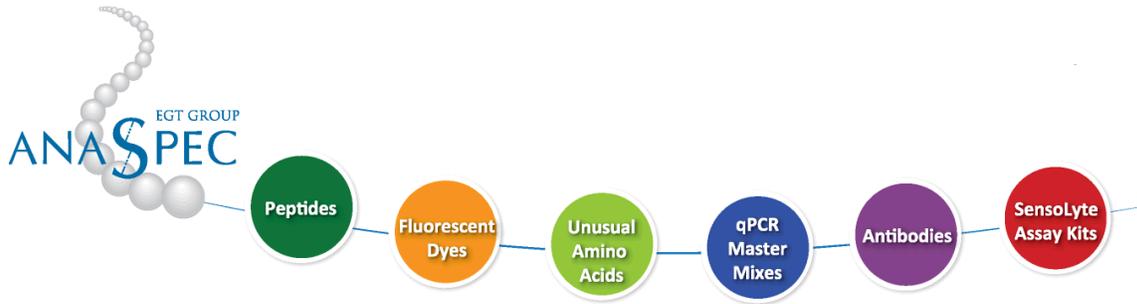


Update: August, 2017

Product Data Sheet

Product Name:	Anti-Tau (Ser409, 412, 413) <i>Rabbit Polyclonal Antibody</i>
Catalog Number:	AS-55416
Lot Number:	See label on vial
Storage Buffer:	1X PBS (pH 7.4) containing 0.05% sodium azide and < 0.1% BSA
Size:	50 µg
Concentration:	0.2 mg/mL
Immunogen:	KLH conjugated with synthetic peptide corresponding to human Tau surrounding region 409, 412, and 413.
Species Reactivity:	Species reactivity includes human, mouse, rat and bovine while others remain unknown. The antibody was evaluated for specificity by dot blot and immunohistochemistry.
Application Notes:	The following concentration ranges are recommended starting points for this product. The investigator should determine the optimal working concentrations for specific applications.
	Dot 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.¹ In adult human brain, 6 isoforms, ranging between 352 and 441 amino acids in length, are produced as a result of alternative RNA splicing.^{2,3} 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.⁴

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.