



## Tau (Phospho-Ser404) Antibody

#11112

**Catalog Number:** 11112-1, 11112-2

**Amount:** 50µg/50µl, 100µg/100µl

**Swiss-Prot No. :** P10636

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from Human Tau around the phosphorylation site of serine 404 (D-T-Sp-P-R).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

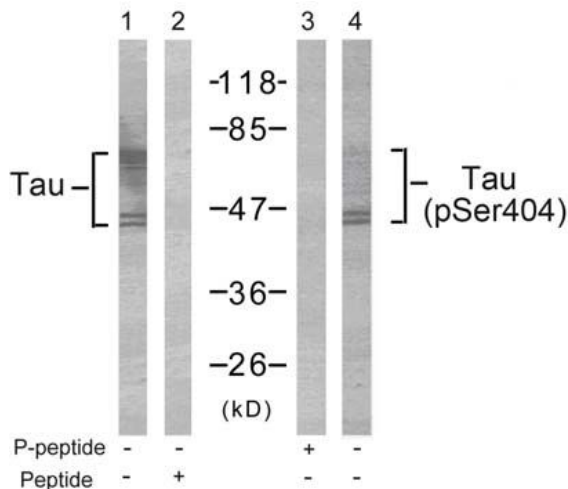
**Specificity/Sensitivity:** Tau (phospho- Ser404) antibody detects endogenous levels of Tau only when phosphorylated at serine 404.

**Reactivity:** Human, Mouse, Rat

### Applications:

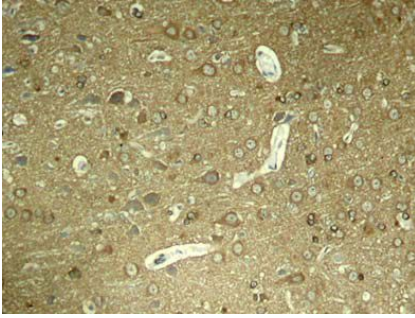
Predicted MW: 48 62 78 kd

WB: 1:500~1:1000 IHC: 1:50~1:200 IF: 1:100~1:200

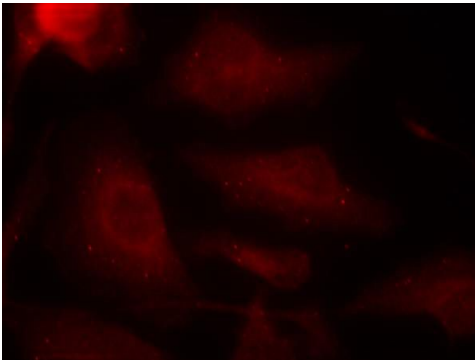


Western blot analysis of extract from mouse brain tissue using Tau (Ab-404) antibody (#21101, Lane 1 and 2) and

Tau (phospho-Ser404) antibody (#11112, Lane 3 and 4).



Immunohistochemical analysis of paraffin-embedded rat hippocampal region tissue from a model with Alzheimer's Disease using Tau (phospho-Ser404) antibody (#11112).



Immunofluorescence staining of methanol-fixed HeLa cells using Tau (phospho-Ser404) antibody (#11112, Red).

**Background** :Promotes microtubule assembly and stability, and might be involved in the establishment and maintenance of neuronal polarity. The C-terminus binds axonal microtubules while the N-terminus binds neural plasma membrane components, suggesting that tau functions as a linker protein between both. Axonal polarity is predetermined by tau localization (in the neuronal cell) in the domain of the cell body defined by the centrosome. The short isoforms allow plasticity of the cytoskeleton whereas the longer isoforms may preferentially play a role in its stabilization.

#### References:

- Li G, Yin H, et al. (2004) J Biol Chem ; 279(16): 15938-45.
- Noble W, et al. (2003) Neuron ; 38(4): 555-65.
- Giasson BI, et al.(2002).. Biochemistry; 41(51): 15376-87.
- Lee G., et al. (1989). Neuron 2:1615-1624.
- Andreadis A.,et al. (1992) Biochemistry 31:10626-10633.