**Description:**
Purified monoclonal antibody against tau phosphorylated at Thr 231

**Also Known As:**
- microtubule-associated protein tau; PHF-tau;
- paired helical filament-tau; neurofibrillary tangle protein; microtubule-associated protein tau, isoform 4; G protein beta1/gamma2 subunit-interacting factor 1

**Intended Use:**
**Research Use Only (RUO)**
This product is sold for laboratory research use only, not for human or in-vivo use.

**Form:**
Purified Antibody (in PBS; no preservatives or carrier proteins)

**Clone:**
PHF-6

**Host:**
Mouse

**IsoType:**
IgG1

**Species Reactivity:**
Human

**[Ab]:**
1 mg/mL

**Specificity:**
Paired helical filaments (PHFs) are the major building blocks of neurofibrillary lesions in Alzheimer's disease brains and are composed of hyperphosphorylated tau protein. Predominantly expressed in axons, alternatively spliced forms of tau comprise a family of microtubule-associated proteins that normally promote and stabilize the assembly of microtubules. PHF-tau differs from normal tau by its abnormal hyperphosphorylation, which results in decreased binding of tau to microtubules. The decreased affinity of PHF-tau for microtubules, coupled with reduced levels of normal tau, destabilizes microtubules leading to an impairment of axonal transport, neuronal death and the aggregation of PHFs. Therefore, hyperphosphorylation of tau is believed to be a key event in the pathogenesis of Alzheimer's disease.

The PHF-6 antibody reacts with human tau phosphorylated at Thr 231 and was raised using PHF-tau preparations from human brain.

**Uses:**
This antibody is effective in immunoblotting.

**Suggested Working Dilution:**
The optimal working dilution should be determined for each specific assay condition.
• WB: 1:1,000

**Storage:**
Store at -20°C. Upon initial thawing, apportion into working aliquots and store at -20°C. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody. For long-term storage, keep the antibody at -80°C.

**References:**
See reverse side for additional information


**Warranty/Conditions:**
Covance products may not be resold or modified for resale without prior written approval. All sales are subject to Covance Antibody Products Terms and Conditions of Sale.

**Datasheet Revision Date:**
6/19/2013