

Anti-Phospho-Tau (Ser416) MAPT Antibody

Catalog Number: P00097

About MAPT

Tau is a key microtubule-associated protein that plays an important role in the formation of microtubules in axons (Binder et al. 1985). Six tau isoforms have been identified as products of a single gene produced by alternative mRNA splicing (Goedert 1990). Tau mutations have been implicated in many neurodegenerative disorders such as Alzheimer's disease (AD), Pick's disease and progressive supranuclear palsy. It has been well documented that hyperphosphorylated tau is a major component of paired helical filaments in AD brain (Lee 1995). Ser-416 has been demonstrated to be a major phosphorylation site in vitro by CaM kinase II (Steiner et al. 1990).

Overview

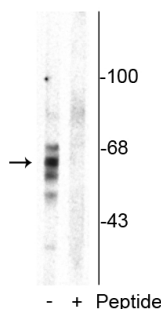
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| Product Name | Anti-Phospho-Tau (Ser416) MAPT Antibody |
| Reactive Species | Human, Mouse, Rat |
| Description | Boster Bio Anti-Phospho-Tau (Ser416) MAPT Antibody (Catalog # P00097). Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat. |
| Application | IHC, WB |
| Clonality | Polyclonal JE44-80 |
| Formulation | 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol. |
| Storage Instructions | Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C. After date of receipt, stable for at least 1 year at -20°C. |
| Host | Rabbit |
| Uniprot ID | P19332 |

Technical Details

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| Immunogen | Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser416 of rat tau, conjugated to keyhole limpet hemocyanin (KLH). Immunogen species is Rat. |
| Predicted Reactive Species | Bovine, Canine, Primate |
| Cross Reactivity | No cross reactivity with other proteins. |
| Isotype | IgG |
| Form | Liquid |
| Concentration | 0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure. |

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| Purification | Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns. |
| Suggested Dilutions | <p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>WB: 1:1000</p> <p>IHC: 1:200</p> |

Anti-Phospho-Tau (Ser416) MAPT Antibody (P00097) Images



Western blot of rat brain homogenate showing specific immunolabeling of the ~59 kDa, ~65 kDa, ~68 kDa Tau isoforms phosphorylated at Ser⁴¹⁶ in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is blocked by preadsorption with the phosphopeptide used as antigen, but not by the corresponding non-phosphopeptide (not shown).

5 Publications Citing This Product

1. PubMed ID: 28934273, Han F1, Zhuang TT1, Chen JJ1, Zhu XL1,2, Cai YF1, Lu YP1. PLoS One. 2017 Sep 21;12(9):e0185102. doi: 10.1371/journal.pone.0185102. eCollection 2017. Novel derivative of Paeonol, Paeononlsilatide sodium, alleviates behavioral damage and hippocampal ...
2. PubMed ID: 30102687, Micro-RNA-137 Inhibits Tau Hyperphosphorylation in Alzheimer's Disease and Targets the CACNA1C Gene in Transgenic Mice and Human Neuroblastoma %u2026
3. PubMed ID: 29044200, Chen C, Gu J, Basurto-Islas G, Jin N, Wu F, Gong CX, Iqbal K, Liu F. Sci Rep. 2017 Oct 18;7(1):13478. doi: 10.1038/s41598-017-13791-5. Up-regulation of casein kinase 1epsilon is involved in tau pathogenesis in Alzheimer's disease

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