Datasheet for ABIN361519

# anti-TAO Kinase 2 antibody (pSer181)

## 2 Images

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## Overview

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| Quantity: | 100 µL |
| Target: | TAO Kinase 2 (TAOK2) |
| Binding Specificity: | pSer181 |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This TAO Kinase 2 antibody is un-conjugated |
| Application: | Western Blotting (WB) |

## Product Details

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| Immunogen: | Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser181 conjugated to KLH |
| Specificity: | Specific for the ~120k TAO2 phosphorylated at Ser181 in Western blots. Immunolabeling is completely eliminated by treatment with phosphatase. |
| Cross-Reactivity: | Human, Mouse (Murine), Rat (Rattus) |
| Predicted Reactivity: | canine, finch, Xenopus, zebrafish |
| Purification: | Antigen Affinity Purified from Pooled Serum |

## Target Details

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| Target: | TAO Kinase 2 (TAOK2) |

## Target Details

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| Alternative Name: | TAOK2 (TAOK2 Products) |
| Background: | In vitro, TAO (thousand and one amino acid) protein kinase 2 (TAO2) activates MAP/ERK kinases (MEKs) 3, 4, and 6 toward their substrates p38 MAP kinase JNK/SAPK (Chen et al., 1999, Chen and Cobb, 2001). This and more recent work has led to the proposal that the TAO protein kinases play an essential role in signaling from physiological agonists to the stress-responsive p38 MAPKs (Chen et al., 2003). Autophosphorylation of TAO may play a role in the mechanism of TAO activation. The MEK binding domain of TAO is autophosphorylated on both serine and threonine residues and Ser181 is located within this domain. Anti-Phospho Ser181 TAO2 Western blot of rat cortex lysate showing specific immunolabeling of the ~120k TAO2 phosphorylated at Ser181 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: (-Ptase). The blot is identical to the control except that it was incubated in (-Ptase (1200 units for 30 min) before being exposed to the Ser181 TAO2 antibody. The immunolabeling is completely eliminated by treatment with (-Ptase. |
| Molecular Weight: | '120 kDa |
| Gene ID: | 9344 |
| UniProt: | Q9UL54 |
| Pathways: | Cell-Cell Junction Organization |

## Application Details

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| Application Notes: | Recommended Dilution: WB: 1:1000 Quality Control: Western blots performed on each lot. |
| Restrictions: | For Research Use only |

## Handling

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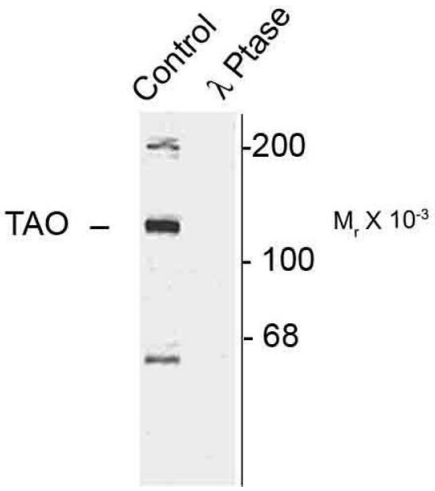
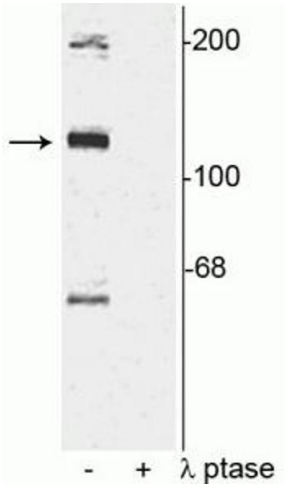
| Format: | Liquid |
| Buffer: | 100 µL in 10 mM HEPES (  pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50 % glycerol. |
| Storage: | -20 °C |




## Western Blotting

**Image 1.** Western blots of rat cortex lysate showing specific immunolabeling of the ~120k TAO2 phosphorylated at Ser181 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: (-Ptase). The blot is identical to the control except that it was incubated in (-Ptase (1200 units for 30 min) before being exposed to the Ser181 TAO2 antibody. The immunolabeling is completely eliminated by treatment with (-Ptase.




## Western Blotting

**Image 2.** Western blot of rat cortical lysate showing specific immunolabeling of the ~120 kDa TAO2 phosphorylated at Ser181 in the first lane (-). Phosphospecificity is shown in the second lane (+) where the immunolabeling is completely eliminated by blot treatment with lambda phosphatase (λ-Ptase, 1200 units for 30 minutes).