

Phospho-Ser181 TAO2 Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1028

Specification

Phospho-Ser181 TAO2 Antibody - Product Information

Application	WB
Primary Accession	O9UL54
Reactivity	Human, Mouse, Rat
Predicted	Xenopus, Zebrafish
Host	Rabbit
Clonality	polyclonal
Calculated MW	120 KDa

Phospho-Ser181 TAO2 Antibody - Additional Information

Gene ID	9344
Gene Name	TAOK2

Other Names

Serine/threonine-protein kinase TAO2, Kinase from chicken homolog C, hKFC-C, Prostate-derived sterile 20-like kinase 1, PSK-1, PSK1, Prostate-derived STE20-like kinase 1, Thousand and one amino acid protein kinase 2, TAOK2, KIAA0881, MAP3K17, PSK, PSK1

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser181 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

Antibody Specificity

Specific for the ~120k TAO2 phosphorylated at Ser181 in Western blots. Immunolabeling is completely eliminated by treatment with λ phosphatase.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Ser181 TAO2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

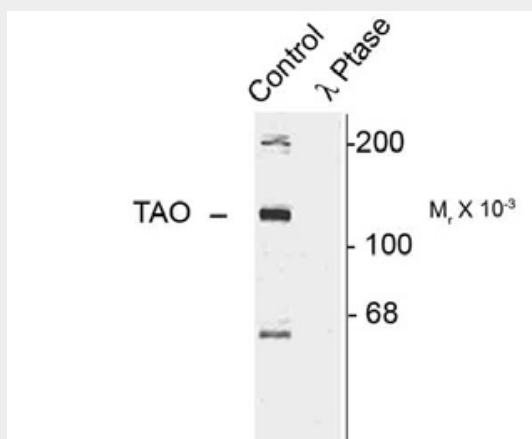
Blue Ice

Phospho-Ser181 TAO2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-Ser181 TAO2 Antibody - Images



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: λ-Ptase). The blot is identical to the control except that it was incubated in λ-Ptase (1200 units for 30 min) before being exposed to the Ser181 TAO2 antibody. The immunolabeling is completely eliminated by treatment with λ-Ptase.

Phospho-Ser181 TAO2 Antibody - 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 Ser 181 is located within this domain.

Phospho-Ser181 TAO2 Antibody - References

Chen Z, Raman M, Chen L, Lee SF, Gilman AG, Cobb MH (2003) TAO (thousand-and-one amino acid) protein kinases mediate signaling from carbachol to p38 mitogen-activated protein kinase and ternary complex factors. J Biol Chem 278:22278-22283.

Chen Z, Cobb, MH (2001) Regulation of stress-responsive mitogen-activated protein (MAP) kinase pathways by TAO2. J Biol Chem 276:16070-16075.

Chen Z, Hutchison M, Cobb MH (1999) Isolation of the protein kinase TAO2 and identification of its mitogen-activated protein kinase/extracellular signal-regulated kinase kinase binding domain. J Biol Chem 274:28803-28807.