ARG52440
anti-TAO2 phospho (Ser181) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes TAO2 phospho (Ser181)
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Cat, Xenopus laevis, Zfsh
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TAO2
Species	Human
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser181 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	hKFC-C; PSK; Thousand and one amino acid protein kinase 2; Prostate-derived sterile 20-like kinase 1; MAP3K17; Kinase from chicken homolog C; PSK1; PSK-1; Prostate-derived STE20-like kinase 1; PSK1-BETA; EC 2.7.11.1; Serine/threonine-protein kinase TAO2; TAO1; TAO2

Application Instructions

Application table

Application	Dilution
WB	1:1000

Application Note: Specific for the ~120k TAO2 phosphorylated at Ser181 in Western blots. Immunolabeling is completely eliminated by treatment with λ phosphatase.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

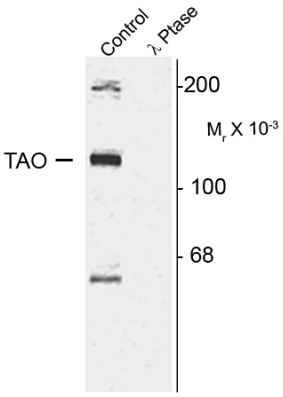
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TAOK2
Gene Full Name	TAO kinase 2
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.
Research Area	Signaling Transduction antibody
Calculated Mw	138 kDa
PTM	Isoforms 1 and 2 are autophosphorylated. C-terminal cleavage of isoform 1 and subsequent nuclear localization requires CASP9 activity. Autophosphorylated. Phosphorylated by ATM. Isoform 2: Phosphorylated on Ser-1031 by MAPK14. This phosphorylation is required PCDH8 for endocytosis (By similarity).

Images



ARG52440 anti-TAO2 phospho (Ser181) antibody WB image

Western blot: Rat cortex lysate showing specific immunolabeling of the ~120k TAO2 phosphorylated at Ser181 (Control) stained with ARG52440 anti-TAO2 phospho (Ser181) antibody. The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: λ-Ptase).