

ARG23898 anti-Phosphoserine / threonine antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Phosphoserine / threonine
Tested Reactivity	Other
Tested Application	ELISA, ICC/IF, IP, WB
Specificity	This antibody detects many serine or threonine phosphorylated proteins by WB, ICC and ELISA.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Serine / Threonine
Species	Human
Immunogen	A panel of phosphoserine and phosphothreonine-containing peptide immunogens designed from human protein sequences. All peptide sequences used are highly conserved in many species.
Conjugation	Un-conjugated

Application Instructions

Application table	Application	Dilution
	ELISA	1:2000
	ICC/IF	1:50
	IP	1:100
	WB	1:1000
Application Note	WB: Antibody is suggested to be diluted in 5% skimmed milk/Tris buffer with 0.04% Tween20 and incubated for 1 hour at room temperature. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Purification	Affinity purification with phospho-specific peptide and the non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS, 0.05% Sodium azide, 50% Glycerol and 1 mg/ml BSA.
Preservative	0.05% Sodium azide
Stabilizer	50% Glycerol and 1 mg/ml BSA
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.

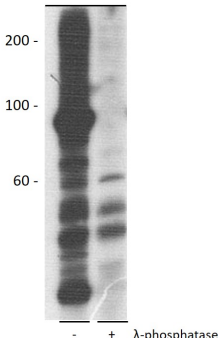
Bioinformation

Background

Phosphorylation of specific serine or threonine residues is an important post-translational modification for regulating the activity of most proteins. Stimulation of a variety of cell signaling pathways activates the receptor and non-receptor ser/thr kinases that mediate these protein modifications. Antibodies that can detect phosphoserine or phosphothreonine residues are excellent tools for characterizing changes in the post-translational state of a broad range of phosphorylated proteins. Immunoprecipitation of proteins of interest followed by detection of phosphoserine or phosphothreonine using anti-phosphoserine antibody is commonly used to correlate changes in phosphorylation state with alterations in protein activity.

Images

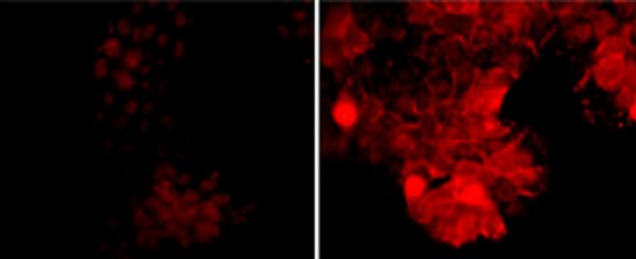
A431 + Calyculin A



- + λ-phosphatase

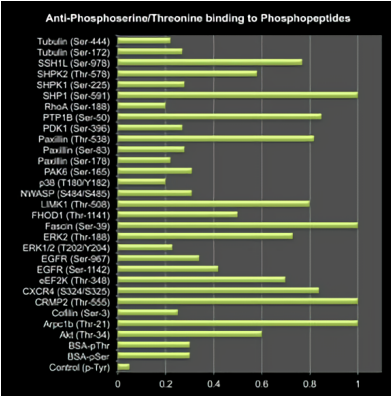
ARG23898 anti-Phosphoserine / threonine antibody WB image

Western blot: A431 cells treated with calyculin A (100 nM) for 30 min (lane 1) then treated with lambda phosphatase (lane 2). The blot was stained with ARG23898 anti-Phosphoserine / threonine antibody at 1:1000 dilution.



ARG23898 anti-Phosphoserine / threonine antibody ICC/IF image

Immunofluorescence: Control (left) and calyculin A-treated (right) A431 cells were stained with ARG23898 anti-Phosphoserine / threonine antibody.



Phosphopeptide	Relative Binding (approx.)
Tubulin (Ser-444)	0.8
Tubulin (Ser-172)	0.8
SSH1L (Ser-978)	0.8
SHP2 (Thr-578)	0.8
SHPK1 (Ser-225)	0.8
SHP1 (Ser-291)	0.8
RhoA (Ser-188)	0.8
PTP1B (Ser-50)	0.8
POK1 (Ser-396)	0.8
Paxillin (Thr-538)	0.8
Paxillin (Ser-83)	0.8
Paxillin (Ser-178)	0.8
PAK4 (Ser-165)	0.8
p38 (T180/Y182)	0.8
NWASP (S484/S485)	0.8
ILK1 (Thr-608)	0.8
FHOD1 (Thr-1141)	0.8
Faszin (Ser-39)	0.8
ERK2 (Thr-188)	0.8
ERK1/2 (T202/Y204)	0.8
EGFR (Ser-967)	0.8
EGFR (Ser-1142)	0.8
eEF2K (Thr-348)	0.8
CXCR4 (S324/S325)	0.8
CRMP2 (Thr-658)	0.8
Collin (Ser-3)	0.8
Arp2/3 (Thr-21)	0.8
Akt (Thr-34)	0.8
BSA-pThr	0.8
BSA-pSer	0.8
Control (p-Tyr)	0.0

ARG23898 anti-Phosphoserine / threonine antibody binding to phosphopeptides

Bar graph showing ARG23898 anti-Phosphoserine / threonine antibody binding to a variety of phosphoserine and phosphothreonine peptides, but not control peptide containing unphosphorylated serine or phosphotyrosine.