DATASHEET

NFAT4 (Phospho-S165) Rabbit Polyclonal Antibody

CAT. NO. APA09416

KEY FEATURES

Target	NFAT4 (Phospho-S165)	Source / Host	Rabbit
Reactivity	Human, Mouse, Monkey	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Acts as a regulator of transcriptional activation. Binds to the TNFSF11/RANKL promoter region and promotes TNFSF11 transcription . Binding to the TNFSF11 promoter region is increased by high levels of Ca(2+) which induce NFATC3 expression and may lead to regulation of TNFSF11 expression in osteoblasts . Plays a role in promoting mesenteric arterial wall remodeling in response to the intermittent hypoxia-induced increase in EDN1 and ROCK signaling . As a result NFATC3 colocalizes with F-actin filaments, translocates to the nucleus and promotes transcription of the smooth muscle hypertrophy and differentiation marker ACTA2 . Promotes lipopolysaccharide-induced apoptosis and hypertrophy in cardiomyocytes .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200
IF/ICC	1:100 - 1:500

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to NFAT4 (Phospho-S165)
Specificity	Recognizes endogenous levels of NFAT4 protein only when phosphorylated at S165.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S165 of human NFAT4 protein. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 115 kD; Observed: 115 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	NFAT4; Nuclear factor of activated T-cells, cytoplasmic 3; NF-ATc3; NFATc3; NFATx; T-cell transcription factor NFAT4; NF-AT4
Gene Symbol	NFATC3
Entrez Gene	4775(Human)
SwissProt	Q12968(Human); P97305(Mouse)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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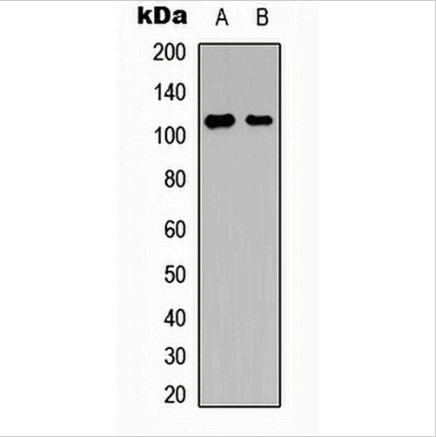
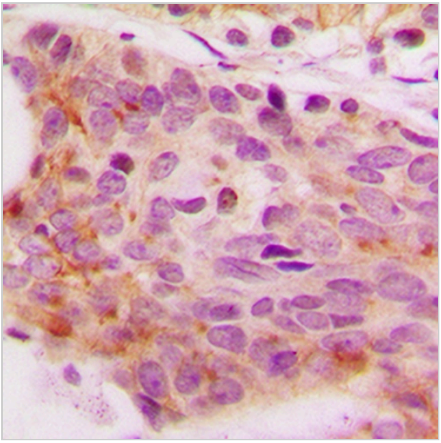
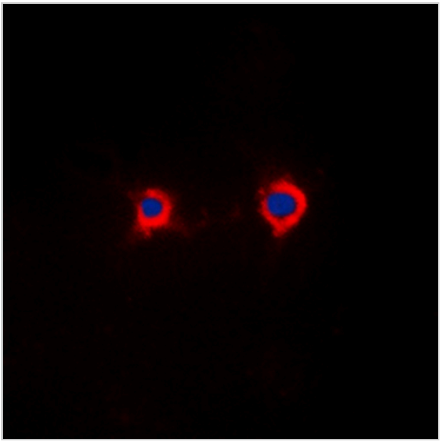
DATA



Western blot analysis of NFAT4 (Phospho-S165) expression in Ramos (A), HeLa (B) whole cell lysates. (Predicted band size: 115 kD; Observed band size: 115 kD)



Immunohistochemical analysis of NFAT4 (Phospho-S165) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of NFAT4 (Phospho-S165) staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.