

Rabbit anti-Human, Mouse NFAT4 Polyclonal Antibody | anti-NFAT4 antibody

Phospho-NFAT4 (Ser165) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321711	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

NFAT4; Polyclonal Antibody; Phospho-NFAT4 (Ser165) Antibody; C80703; cytoplasmic 3; D8Ertd281e; NF AT4; NF ATc3; NF-AT4; NF-ATc3; NFAC3_HUMAN; NFATc3; NFATx; Nuclear factor of activated T cells; nuclear factor of activated T cells; cytoplasmic; calcineurin dependent 3; Nuclear factor of activated T-cells; T cell transcription factor NFAT4; T-cell transcription factor NFAT4; anti-NFAT4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-NFAT4 (Ser165) antibody detects endogenous levels of NFAT4 only when phosphorylated at Serine 165
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1068
Applicable Applications for anti-NFAT4 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human NFAT4 around the phosphorylation site of Serine 165
Subcellular Location	Cytoplasm. Nucleus. Cytoplasmic for the phosphorylated form and nuclear after activation that is controlled by calcineurin-mediated dephosphorylation. Rapid nuclear exit of NFATC is thought to be one mechanism by which cells distinguish between sustained and transient calcium signals. The subcellular localization of NFATC plays a key role in the regulation of gene transcription.
Tissue Specificity	Isoform 1 is predominantly expressed in thymus and is also found in peripheral blood leukocytes and kidney. Isoform 2 is predominantly expressed in skeletal muscle and is also found in thymus, kidney, testis, spleen, prostate, ovary, small intestine, heart, placenta and pancreas. Isoform 3 is expressed in thymus and kidney. Isoform 4 is expressed in thymus and skeletal muscle.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%)
Conjugation	Unconjugated
Epitope	Phospho Ser165
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA321711 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of Phospho-NFAT4 (Ser165) expression in various lysates



IF (Immunofluorescence)

AAA321711 staining HeLa cells by ICC/IF. Cells were fixed with PFA and permeabilized in 0.1% saponin prior to blocking in 10% serum for 45 minutes at 37 degree C. The primary antibody was diluted 1/400 and incubated with the sample for 1 hour at 37 degree C. A Alexa Fluor 594 conjugated goat polyclonal to rabbit IgG (H+L), diluted 1/600 was used as secondary antibody.



WB (Western Blot)

Western blot analysis of NFAT4 phosphorylation expression in HeLa whole cell lysates, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-NFAT4 antibody	Description: The product of this gene is a member of the nuclear factors of activated T cells DNA-binding transcription complex. This complex consists of at least two components: a preexisting cytosolic component that translocates to the nucleus upon T cell receptor (TCR) stimulation and an inducible nuclear component. Function: Acts as a regulator of transcriptional activation. Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2. Subunit Structure: Member of the multicomponent NFATC transcription complex that consists of at least two components, a pre-existing cytoplasmic component NFATC2 and an inducible nuclear component NFATC1. Other members such as NFATC4, NFATC3 or members of the activating protein-1 family, MAF, GATA4 and Cbp/p300 can also bind the complex. NFATC proteins bind to DNA as monomers. Post-translational Modifications: Phosphorylated by NFATC-kinase; dephosphorylated by calcineurin. Similarity: Rel Similarity Domain (RSD) allows DNA-binding and cooperative interactions with AP1 factors.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4758804
NCBI GeneID	4775
NCBI Accession #	NP_004546.1
NCBI GenBank Nucleotide #	NM_004555.3
UniProt Accession #	Q12968; O75211; Q14516; Q99840; Q99841; Q99842
Molecular Weight	Observed: 115 kDa Predicted: 116 kDa
NCBI Official Full Name	nuclear factor of activated T-cells, cytoplasmic 3 isoform 2
NCBI Official Synonym Full Names	nuclear factor of activated T cells 3
NCBI Official Symbol	NFATC3
NCBI Official Synonym Symbols	NFAT4; NFATX
NCBI Protein Information	nuclear factor of activated T-cells, cytoplasmic 3
UniProt Protein Name	Nuclear factor of activated T-cells, cytoplasmic 3

UniProt Gene Name	NFATC3
UniProt Synonym Gene Names	NFAT4; NF-ATc3; NFATc3; NF-AT4

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/nfat4-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/321711>