NFATc2 Monoclonal Antibody

Catalog No	YP-mAb-10731
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	NFATC2 NFAT1 NFATP
Protein Name	Nuclear factor of activated T-cells, cytoplasmic 2 (NF-ATc2) (NFATc2) (NFAT pre-existing subunit) (NF-ATp) (T-cell transcription factor NFAT1)
Immunogen	Synthetic peptide from human protein at AA range: 640-700
Specificity	The antibody detects endogenous NFATc2
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Nuclear factor of activated T-cells, cytoplasmic 2 (NF-ATc2;NFATc2;NFAT pre-existing subunit;NF-ATp;T-cell transcription factor NFAT1)
Observed Band	100kD
Cell Pathway	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	Expressed in thymus, spleen, heart, testis, brain, placenta, muscle and pancreas. Isoform 1 is highly expressed in the small intestine, heart, testis, prostate, thymus, placenta and thyroid. Isoform 3 is highly expressed in stomach, uterus, placenta, trachea and thyroid.
Function	alternative products:Additional isoforms seem to exist,domain:Rel Similarity Domain (RSD) allows DNA-binding and cooperative interactions with AP1 factors.,function:Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2, IL-3, IL-4, TNF-alpha or GM-CSF.,induction:Inducibly expressed in T-lymphocytes upon activation of the T-cell receptor (TCR) complex. Induced after co-addition of phorbol 12-myristate 13-acetate (PMA) and ionomycin.,PTM:In resting cells, phosphorylated by NFATC-kinase on at least 18 sites in the 99-363 region. Upon cell stimulation, all these sites except Ser-243 are dephosphorylated by calcineurin.

	Dephosphorylation induces a conformational change that simultaneously exposes an NLS and masks an NES, which results in nuclear localization. Simultaneously, Ser-53 or Ser-56 is phosphorylated; which is required for full
Background	This gene is a member of the nuclear factor of activated T cells (NFAT) family. The product of this gene is a DNA-binding protein with a REL-homology region (RHR) and an NFAT-homology region (NHR). This protein is present in the cytosol and only translocates to the nucleus upon T cell receptor (TCR) stimulation, where it becomes a member of the nuclear factors of activated T cells transcription complex. This complex plays a central role in inducing gene transcription during the immune response. Alternate transcriptional splice variants encoding different isoforms have been characterized. [provided by RefSeq, Apr 2012],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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