For Research Use Only

NFATC1 Monoclonal antibody

Catalog Number:66963-1-Ig Featured Product 56 Publications

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Basic Information

Catalog Number:
66963-1-Ig

Size:
150ul , Concentration: 2000 ug/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG13014

GenBank Accession Number:
BC104753

GeneID (NCBI):
4772

UNIPROT ID:
O95644

Full Name:
nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1

Calculated MW:
716aa,78 kDa; 943aa,101 kDa

Observed MW:
101 kDa

Purification Method:
Protein A purification

CloneNo.:
1E1B10

Recommended Dilutions:
WB 1:2000-1:10000
IHC 1:150-1:600

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB, IHC, IF, IP

Species Specificity:
human

Cited Species:
human, mouse, rat, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : Jurkat cells, U2OS cells, Daudi cells, Romas cells, Raji cells, A549 cells, MOLT-4 cells, Ramos cells, Karpas-422 cells

IHC : human urothelial carcinoma tissue, human lymphoma tissue

Background Information

NFATc1(nuclear factor-activated T cells c1) is one of the transcription factors family consisting 5 members which were considered as a regulator of T-cell activation. In immune cell, NFATc1 is located in the cytoplasm in a hyperphosphorylated state and translocates into the nucleus upon cell stimulation via dephosphorylation(PMID:28327458). One paper observed that ectopic expression and nuclear accumulation of NFATc1 in more than 60% of human pancreatic cancers (PMID:25623042). Several alternative splicing transcript variants encoding different isoforms have been identified for this gene. And different isoforms of this protein may regulate different cytokine gene expression. NFATc1 is a main transcriptional activator for cytokine genes in activated lymphoid cells. Also some studies demonstrated that NFATc1 plays the role of a master transcription regulator of osteoclast differentiation (PMID:25489571).

Notable Publications

Author	Pubmed ID	Journal	Application
Huanhuan Xu	35558992	RSC Adv	WB
Beimin Tian	36064833	Int J Oral Sci	IF
Hui-Wen Chiu	34633122	J Bone Miner Res	WB

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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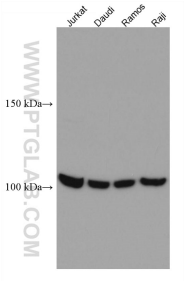
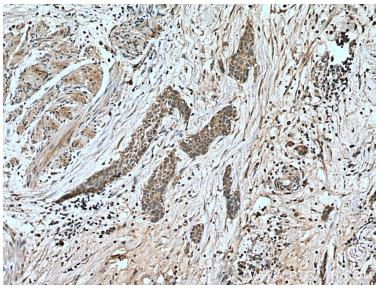
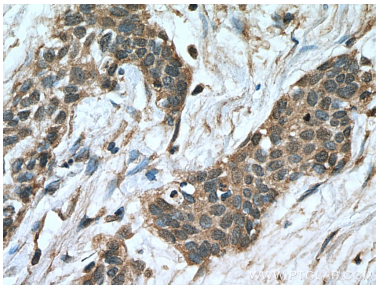
Selected Validation Data



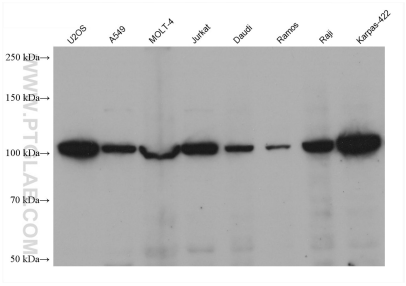
Various lysates were subjected to SDS PAGE followed by western blot with 66963-1-Ig (NFATC1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using 66963-1-Ig (NFATC1 antibody) at dilution of 1:300 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using 66963-1-Ig (NFATC1 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 66963-1-Ig (NFATC1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.