

## NFATC1 Antibody

Catalog No: #32303

Package Size: #32303-1 50ul #32303-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

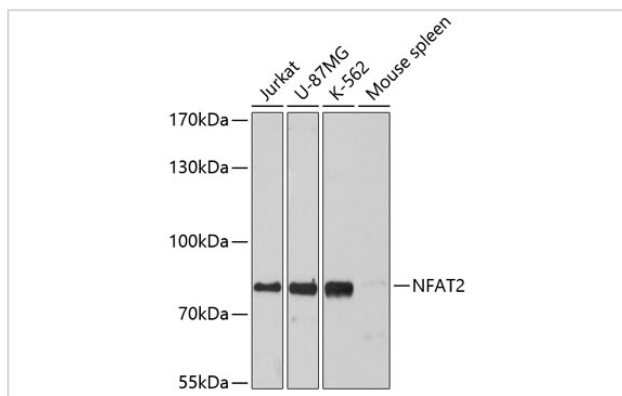
## Description

Product Name	NFATC1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total NFATC1 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human NFATC1.
Target Name	NFATC1
Other Names	MGC138448; NF-ATC; NFAT2; NFATc;
Accession No.	Swiss-Prot:O95644NCBI Gene ID:4772
Uniprot	O95644
GeneID	4772;
SDS-PAGE MW	78;101KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

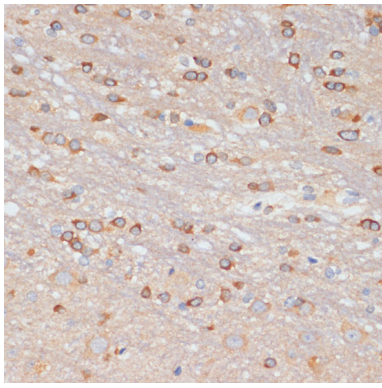
## Application Details

WB □ 1:500 - 1:3000 IHC □ 1:50 - 1:200 IF □ 1:50 - 1:200

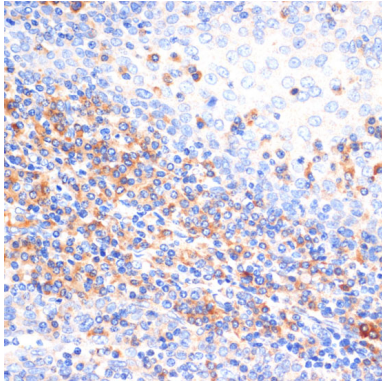
## Images



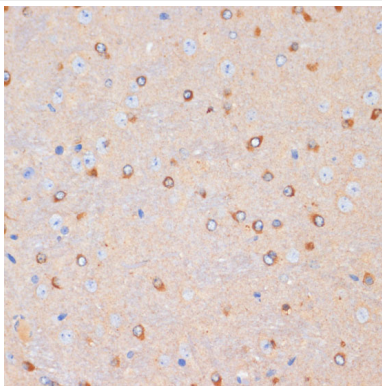
Western blot analysis of extracts of various cell lines, using NFAT2 at 1:3000 dilution.



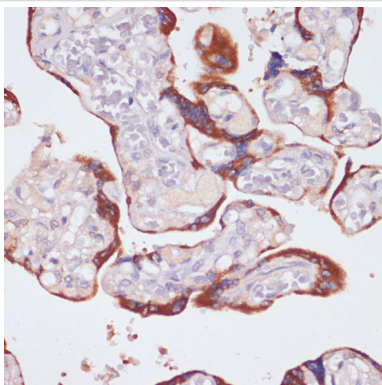
Immunohistochemistry of paraffin-embedded rat brain using NFAT2 at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human tonsil using NFAT2 at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded mouse brain using NFAT2 at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human placenta using NFAT2 at dilution of 1:200 (40x lens).

## Background

The NFAT (nuclear factor of activated T cells) family of proteins consists of NFAT1 (NFATc2 or NFATp), NFAT2 (NFATc1 or NFATc), NFAT3 (NFATc4), and NFAT4 (NFATc3 or NFATx). All members of this family are transcription factors with a Rel homology domain and regulate gene transcription in concert with AP-1 (Jun/Fos) to orchestrate an effective immune response (1,2). NFAT proteins are predominantly expressed in cells of the immune system, but are also expressed in skeletal muscle, keratinocytes, and adipocytes, regulating cell differentiation programs in these cells (3). In resting cells, NFAT proteins are heavily phosphorylated and localized in the cytoplasm. Increased intracellular calcium concentrations activate the calcium/calmodulin-dependent serine phosphatase calcineurin, which dephosphorylates NFAT proteins, resulting in their subsequent translocation to the nucleus (2). Termination of NFAT signaling occurs upon declining calcium concentrations and phosphorylation of NFAT by kinases such as GSK-3

or CK1 (3,4). Cyclosporin A and FK506 are immunosuppressive drugs that inhibit calcineurin and thus retain NFAT proteins in the cytoplasm (5).

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Note: This product is for in vitro research use only