

Product Information

NFATC1, GST-tagged, human recombinant, expressed in Sf9 insect cells

Catalog Number **SRP5104**
Storage Temperature -70°C

Synonyms: NF-ATC, NFATc, NFAT2

Product Description

NFATC1 is a member of the NFAT family of proteins, which are Ca^{2+} /calcineurin-responsive transcription factors primarily recognized for their central roles in T lymphocyte activation and cardiac valve development.¹ NFAT 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. Proteins belonging to the NFAT family of transcription factors play a central role in inducible gene transcription during immune response. The product of NFATC1 is an inducible nuclear component and functions as a major molecular target for the immunosuppressive drugs such as cyclosporin A.²

Recombinant, full-length, human NFATC1 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is NM_172390. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 50 mM NaCl, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~125 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

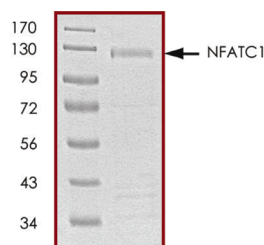
Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70°C is recommended. After opening, aliquot into smaller quantities and store at -70°C . Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)



References

1. Buchholz, M. et al., Overexpression of c-myc in pancreatic cancer caused by ectopic activation of NFATc1 and the Ca^{2+} /calcineurin signaling pathway. *EMBO. J.*, **25**, 3714-3724 (2006).
2. Jhun, B.S. et al., Inhibition of AMP-activated protein kinase suppresses IL-2 expression through down-regulation of NF-AT and AP-1 activation in Jurkat T cells. *Biochem. Biophys. Res. Commun.*, **351**, 986-992 (2006).

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