

NXF1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14539a

Specification

NXF1 Antibody (N-term) - Product Information

Application WB, IHC-P,E **Primary Accession 09UBU9** Other Accession NP 006353.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 70182 Antigen Region 1-30

NXF1 Antibody (N-term) - Additional Information

Gene ID 10482

Other Names

Nuclear RNA export factor 1, Tip-associated protein, Tip-associating protein, mRNA export factor TAP, NXF1, TAP

Target/Specificity

This NXF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human NXF1.

Dilution

WB~~1:1000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

NXF1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NXF1 Antibody (N-term) - Protein Information

Name NXF1



Synonyms TAP

Function Involved in the nuclear export of mRNA species bearing retroviral constitutive transport elements (CTE) and in the export of mRNA from the nucleus to the cytoplasm (TAP/NFX1 pathway) (PubMed:10924507). The NXF1-NXT1 heterodimer is involved in the export of HSP70 mRNA in conjunction with ALYREF/THOC4 and THOC5 components of the TREX complex (PubMed:18364396, PubMed:19165146, PubMed:9660949). ALYREF/THOC4-bound mRNA is thought to be transferred to the NXF1-NXT1 heterodimer for export (PubMed:18364396, PubMed:19165146, PubMed:9660949). Also involved in nuclear export of m6A-containing mRNAs: interaction between SRSF3 and YTHDC1 facilitates m6A-containing mRNA-binding to both SRSF3 and NXF1, promoting mRNA nuclear export (PubMed:28984244).

Cellular Location

Nucleus. Nucleus, nucleoplasm Nucleus speckle. Nucleus, nuclear pore complex. Nucleus envelope. Cytoplasm. Cytoplasm, Stress granule. Note=Localized predominantly in the nucleoplasm and at both the nucleoplasmic and cytoplasmic faces of the nuclear pore complex. Shuttles between the nucleus and the cytoplasm. Travels to the cytoplasm as part of the exon junction complex (EJC) bound to mRNA. The association with the TREX complex seems to occur in regions surrounding nuclear speckles known as perispeckles (PubMed:23826332). Nucleus; nuclear rim (PubMed:25662211)

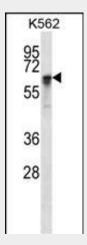
Tissue Location
Expressed ubiquitously.

NXF1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

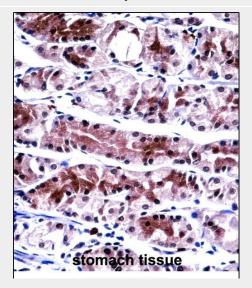
NXF1 Antibody (N-term) - Images



NXF1 Antibody (N-term) (Cat. #AP14539a) western blot analysis in K562 cell line lysates



(35ug/lane). This demonstrates the NXF1 antibody detected the NXF1 protein (arrow).



NXF1 Antibody (N-term) (AP14539a)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of NXF1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

NXF1 Antibody (N-term) - Background

This gene is one member of a family of nuclear RNA export factor genes. Common domain features of this family are a noncanonical RNP-type RNA-binding domain (RBD), 4 leucine-rich repeats (LRRs), a nuclear transport factor 2 (NTF2)-like domain that allows heterodimerization with NTF2-related export protein-1 (NXT1), and a ubiquitin-associated domain that mediates interactions with nucleoporins. The LRRs and NTF2-like domains are required for export activity. Alternative splicing seems to be a common mechanism in this gene family. The encoded protein of this gene shuttles between the nucleus and the cytoplasm and binds in vivo to poly(A)+ RNA. It is the vertebrate homologue of the yeast protein Mex67p. The encoded protein overcomes the mRNA export block caused by the presence of saturating amounts of CTE (constitutive transport element) RNA of type D retroviruses. Alternative splicing results in multiple transcript variants.

NXF1 Antibody (N-term) - References

Read, E.K., et al. J. Gen. Virol. 91 (PT 5), 1290-1301 (2010): Corbin-Lickfett, K.A., et al. J. Virol. 84(5):2212-2222(2010) Hautbergue, G.M., et al. Curr. Biol. 19(22):1918-1924(2009) Uranishi, H., et al. J. Biol. Chem. 284(38):26106-26116(2009) Ote, I., et al. PLoS ONE 4 (11), E7882 (2009):