

Rabbit anti-Human, Mouse NXF1 Polyclonal Antibody | anti-NXF1 antibody

NXF1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321001	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

NXF1; Polyclonal Antibody; NXF1 Antibody; DKFZp667O0311; DmNXF1; MEX67; yeast; homolog of; Mex67p; mRNA export factor TAP; Mvb1; Nuclear RNA export factor 1; Nuclear RNA export factor 1 homolog (S. cerevisiae); nxf 1; NXF1_HUMAN; Protein small bristles; Sbr; TAP; Tip associating protein; Tip-associated protein; Tip-associating protein; anti-NXF1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	NXF1 antibody detects endogenous levels of total NXF1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	356
Applicable Applications for anti-NXF1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human NXF1
Subcellular Location	Nucleus > Nucleoplasm. Nucleus Speckle. Cytoplasm. 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.
Tissue Specificity	Expressed ubiquitously.
Predicted Cross Reactivity	Pig, Bovine, Sheep, Dog, Chicken, Xenopus
Similarity	Pig (80%), Bovine (80%), Sheep (80%), Dog (80%), Chicken (100%), Xenopus (80%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)
Western blot analysis of extracts from 293 and HeLa, using NXF1 Antibody.



IF (Immunofluorescence)
AAA321001 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of extracts from 293 and mouse brain, using NXF1 Antibody.



WB (Western Blot)
Western blot analysis on HeLa cell lysate using NXF1 Antibody, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-NXF1 antibody

Description: NXF1 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. The NXF1-NXT1 heterodimer is involved in the export of HSP70 mRNA in conjunction with THOC4 and THOC5. Belongs to the NXF family. Heterodimer with NXT1. Interacts (via NTF2 domain) with NXT1. The formation of NXF1/NXT1 heterodimers is required for the NXF1-mediated nuclear mRNA export. Interacts with NXT2, E1B-AP5, RAE1, THOC4 and with several nucleoporins. Is part of the exon junction complex (EJC) containing NCBP1, NCBP2, RNPS1, RBM8A, SRRM1, NXF1, RENT1, RENT2, RENT3A, RENT3B, THOC4 and/or REFBP2. Found in a mRNA complex with RENT3A and RENT3B. Interacts with FYTDD1/UIF, EIF4A3, NUPL2 and THOC5.

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. ALYREF/THOC4-bound mRNA is thought to be transferred to the NXF1-NXT1 heterodimer for export.

Subunit Structure: Heterodimer (via NTF2 domain) with NXT1 (PubMed:11583626). The formation of NXF1-NXT1 heterodimers is required for the NXF1-mediated nuclear mRNA export (PubMed:11583626). Forms a complex with RANBP2/NUP358, NXT1 and RANGAP1 (PubMed:14729961). Associates with the exon junction complex (EJC) and with the transcription/export (TREX) complex (PubMed:11707413, PubMed:22893130). Found in a mRNA complex with UPF3A and UPF3B (PubMed:11546873). Found in a post-splicing complex with RBM8A, UPF1, UPF2, UPF3A, UPF3B and RNPS1 (PubMed:11546874). Interacts (via N-terminus) with DHX9 (via N-terminus); this interaction is direct and negatively regulates NXF1-mediated nuclear export of constitutive transport element (CTE)-containing cellular mRNAs (PubMed:10924507). Interacts with ALYREF/THOC4 (PubMed:11707413, PubMed:14730019, PubMed:19165146, PubMed:23299939). Interacts with FYTDD1/UIF (PubMed:19836239). Interacts with EIF4A3 (PubMed:14730019). Interacts with NUPL2 (PubMed:10228171). Interacts with THOC5 (PubMed:19165146, PubMed:23299939). Interacts with CHTOP (PubMed:23299939, PubMed:23826332). Interacts with FRG1 (via N-terminus) (PubMed:21699900). Interacts with LUZP4 (PubMed:25662211). Interacts with FMR1; the interaction occurs in a mRNA-dependent and polyribosomes-independent manner in the nucleus (PubMed:18936162). Interacts with CPSF6 (via N-terminus); this interaction is direct (PubMed:19864460).

Similarity: The minimal CTE binding domain consists of an RNP-type RNA binding domain (RBD) and leucine-rich repeats. The nucleoporin binding domain consists of a NTF2 domain (also called NTF2-like domain) and a TAP-C domain (also called UBA-like domain). It has 2 nucleoporin-FG-repeats binding sites (one in the NTF2 and the other in the TAP-C domain) which contribute to nucleoporin association and act synergistically to export cellular mRNAs. The NTF2 domain is functional only in the presence of NXT1 and is essential for the export of mRNA from the nucleus. It inhibits RNA binding activity through an intramolecular interaction with the N-terminal RNA binding domain (RBD); the inhibition is removed by an association with the TREX complex, specifically involving ALYREF/THOC4 and THOC5. The TAP-C domain mediates direct interactions with nucleoporin-FG-repeats and is necessary and sufficient for localization of NXF1 to the nuclear rim. The conserved loop 594-NWD-596 of the TAP-C domain has a critical role in the interaction with nucleoporins. The leucine-rich repeats are essential for the export of mRNA from the nucleus. The RNA-binding domain is a non-canonical RNP-type domain. Belongs to the NXF family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	125625324
NCBI GeneID	10482
NCBI Accession #	NP_001074960.1
NCBI GenBank Nucleotide #	NM_001081491.1
UniProt Accession #	Q9UBU9; Q99799; Q9UQL2; B4E269
Molecular Weight	Observed: 70 kDa Predicted: 71 kDa
NCBI Official Full Name	nuclear RNA export factor 1 isoform 2
NCBI Official Synonym Full Names	nuclear RNA export factor 1
NCBI Official Symbol	NXF1
NCBI Official Synonym Symbols	TAP; MEX67
NCBI Protein Information	nuclear RNA export factor 1
UniProt Protein Name	Nuclear RNA export factor 1
UniProt Gene Name	NXF1
UniProt Synonym Gene Names	TAP

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/nxf1-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/321001>