

Rabbit THOC4 Polyclonal Antibody | anti-THOC4 antibody

THOC4 Antibody

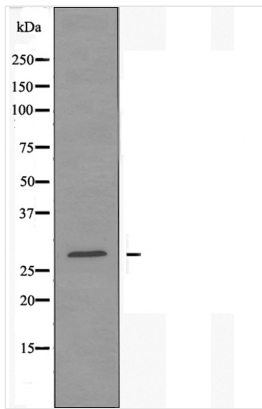
CATALOG # AAA325306	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunocytochemistry, Immunofluorescence, Western Blot
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PRODUCT SYNONYMS

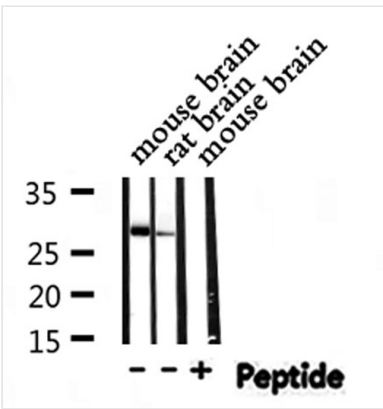
THOC4; Polyclonal Antibody; THOC4 Antibody; Ally of AML-1 and LEF-1; Ally of AML1 and LEF1; ALY; ALY/REF; Aly/REF export factor; BEF; bZIP enhancing factor; bZIP-enhancing factor BEF; REF; THO complex 4; THO complex subunit 4; Tho4; thoc4; THOC4_HUMAN; Transcriptional coactivator Aly/REF; Transcriptional coactivator; anti-THOC4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	THOC4 antibody detects endogenous levels of total THOC4
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	264
Applicable Applications for anti-THOC4 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Nucleus. Nucleus Speckle. Cytoplasm. Colocalizes with the core EJC, THOC4, NXF1 and DDX39B in the nucleus and nuclear speckles. Travels to the cytoplasm as part of the exon junction complex (EJC) bound to mRNA.
Tissue Specificity	Expressed in a wide variety of cancer types.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Dog, Xenopus
Similarity	Pig (100%), Zebrafish (100%), Bovine (100%), Horse (100%), Sheep (100%), Dog (100%), Xenopus (100%)
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 LOVO cells using THOC4 antibody.



WB (Western Blot)
Western blot analysis of THOC4 expression in various lysates



IF (Immunofluorescence)
AAA325306 staining LOVO cells 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) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-THOC4 antibody	Function: Export adapter involved in nuclear export of spliced and unspliced mRNA. Binds mRNA which is thought to be transferred to the NXF1-NXT1 heterodimer for export (TAP/NFX1 pathway). Component of the TREX complex which is thought to couple mRNA transcription, processing and nuclear export, and specifically associates with spliced mRNA and not with unspliced pre-mRNA. TREX is recruited to spliced mRNAs by a transcription-independent mechanism, binds to mRNA upstream of the exon-junction complex (EJC) and is recruited in a splicing-and cap-dependent manner to a region near the 5' end of the mRNA where it functions in mRNA export to the cytoplasm. TREX recruitment occurs via an interaction between ALYREF/THOC4 and the cap-binding protein NCBP1. The TREX complex is essential for the export of Kaposi's sarcoma-associated herpesvirus (KSHV) intronless mRNAs and infectious virus production; ALYREF/THOC4 mediates the recruitment of the TREX complex to the intronless viral mRNA. Required for TREX complex assembly and for linking DDX39B to the cap-binding complex (CBC). In conjunction with THOC5 functions in NXF1-NXT1 mediated nuclear export of HSP70 mRNA; both proteins enhance the RNA binding activity of NXF1 and are required for NXF1 localization to the nuclear rim. Involved in the nuclear export of intronless mRNA; proposed to be recruited to intronless mRNA by ATP-bound DDX39B. Involved in transcription elongation and genome stability. Subunit Structure: Homomultimer. Is part of several complexes involved in mRNA processing and export. Component of the transcription/export (TREX) complex at least composed of ALYREF/THOC4, DDX39B, SARNP/CIP29, CHTOP and the THO subcomplex; TREX seems to have a dynamic structure involving ATP-dependent remodeling; in the complex interacts (via C-terminus) directly with DDX39B and interacts directly with THOC1 and THOC2. Found in mRNA splicing-dependent exon junction complexes (EJC). Identified in the spliceosome C complex. Found in a mRNP complex with UPF3A and UPF3B. Interacts with RBM8A, NCBP1, THOC5, LEF1, RUNX1, EIF4A3, RNPS1, SRRM1, IWS1 and EXOSC1. Interacts with NXF1; the interaction is direct. Interacts with human Kaposi's sarcoma-associated herpesvirus (HHV-8) ORF57 protein; this interaction allows efficient export of HHV-8 early and late intronless transcripts. Interacts with HHV-1 ICP27 protein; this interaction recruits ALYREF to viral replication compartments and probably directs viral mRNA to the TAP/NFX1 pathway. Post-translational Modifications: Arg-204 is dimethylated, probably to asymmetric dimethylarginine. Arginine methylation reduces RNA binding. Citrullinated by PAD14. Similarity: Belongs to the ALYREF family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	238776833
NCBI GeneID	10189
NCBI Accession #	NP_005773.3
NCBI GenBank Nucleotide #	NM_005782.3
UniProt Accession #	Q86V81; O43672
Molecular Weight	Observed: 27 kD Predicted: 27 kDa
NCBI Official Full Name	THO complex subunit 4
NCBI Official Synonym Full Names	Aly/REF export factor
NCBI Official Symbol	ALYREF
NCBI Official Synonym Symbols	ALY; BEF; REF; THOC4; ALY/REF
NCBI Protein Information	THO complex subunit 4
UniProt Protein Name	THO complex subunit 4
UniProt Gene Name	ALYREF
UniProt Synonym Gene Names	ALY; BEF; THOC4; Tho4

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.

