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THOC2 Rabbit pAb

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Catalog # AP56339

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8NI27
Reactivity	Human
Predicted	Rat, Pig, Dog, Mouse, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	182775
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human THOC2
Epitope Specificity	101-200/1593
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	THOC2 is a 1,478 amino acid nuclear protein that functions as a component of the heteromultimeric THO/TREX (transcription/export) complex, a multi-protein structure consisting of THOC1, THOC2, THOC3, BAT1 and ALY. The THO/TREX complex is recruited to transcribed genes and travels with RNA polymerase II (Pol II) during elongation, coupling elongating Pol II with RNA splicing and export factors. Defects in the protein components of the TREX structure can cause transcription impairment, mRNA export defects and transcription-associated recombination. THOC2, an important component of the TREX complex, exists as two isoforms that are produced by alternative splicing events.

Additional Information

Gene ID	57187
Other Names	THO complex subunit 2, Tho2, hTREX120, THOC2, CXorf3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

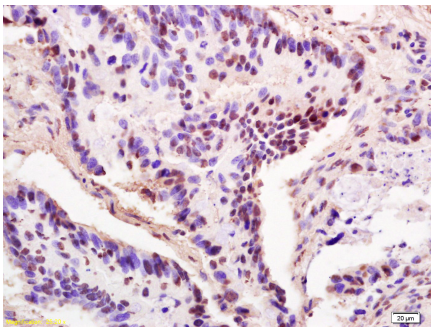
Protein Information

Name	THOC2
Synonyms	CXorf3
Function	Component of the THO subcomplex of the TREX complex which is thought to couple mRNA transcription, processing and nuclear export, and which specifically associates with spliced mRNA and not with unspliced pre-mRNA (PubMed:15833825, PubMed:15998806, PubMed:17190602). Required for efficient export of polyadenylated RNA and spliced mRNA (PubMed:23222130). The THOC1-THOC2-THOC3 core complex alone is sufficient to bind export factor NXF1-NXT1 and promote ATPase activity of DDX39B; in the complex THOC2 is the only component that directly interacts with DDX39B (PubMed:33191911). 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 via the TAP/NXF1 pathway (PubMed:15833825, PubMed:15998806, PubMed:17190602). Required for NXF1 localization to the nuclear rim (PubMed:22893130). THOC2 (and probably the THO complex) is involved in releasing mRNA from nuclear speckle domains.
Cellular Location	Nucleus. Nucleus speckle. Cytoplasm
Tissue Location	Expressed in the hippocampus and the cerebral cortex.

Background

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Images



Tissue/cell: human colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-THOC2 Polyclonal Antibody, Unconjugated(AP56339) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.