abcam

Product datasheet

Anti-THOC5 antibody ab221049

2 Images

Overview

Product name Anti-THOC5 antibody

Description Rabbit polyclonal to THOC5

Host species Rabbit

Tested applications Suitable for: ICC/IF, WB

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Cow

Immunogen Recombinant fragment corresponding to Human THOC5 aa 300-450.

Database link: Q13769

Run BLAST with
Run BLAST with

Positive control RT4 cell lysate; U-2 OS cells.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.02% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab221049 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 0.25 - 2 µg/ml. Fixation/Permeabilization: PFA/Triton X-100.
WB		Use a concentration of 0.04 - 0.4 μg/ml. Predicted molecular weight: 79 kDa.

Target

Function

Component the THO subcomplex of the TREX complex. The TREX complex specifically associates with spliced mRNA and not with unspliced pre-mRNA. It 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. The 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. The recruitment of the TREX complex to the intronless viral mRNA occurs via an interaction beteen KSHV ORF57 protein and ALYREF/THOC4. DDX39B functions as a bridge between ALYREF/THOC4 and the THO complex. THOC5 in conjunction with ALYREF/THOC4 functions in NXF1-NXT1 mediated nuclear export of HSP70 mRNA. Regulates the expression of myeloid transcription factors CEBPA, CEBPB and GAB2 by enhancing the levels of phosphatidylinositol 3,4,5-trisphosphate. May be involved in the differentiation of granulocytes and adipocytes. Essential for hematopoietic primitive cell survival and plays an integral role in monocytic development.

Tissue specificity

Ubiquitously expressed.

Sequence similarities

Belongs to the THOC5 family.

Post-translational modifications

Phosphorylated on tyrosine upon binding to activated CSF1R; which causes a dissociation of the

two proteins. Phosphorylation on Ser-5 and/or Ser-6 is required for nuclear export.

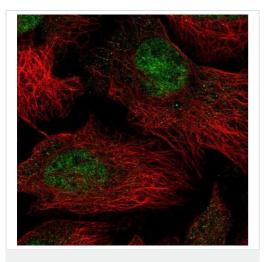
 $Phosphory lated \ on \ Thr-328 \ in \ insulin-stimulated \ adipocytes \ (By \ similarity). \ Phosphory lated \ upon$

DNA damage, probably by ATM or ATR.

Cellular localization

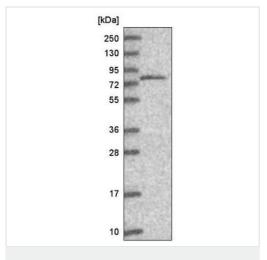
Nucleus. Cytoplasm. Shuttles between nucleus and cytoplasm.

Images



Immunocytochemistry/ Immunofluorescence - Anti-THOC5 antibody (ab221049)

Immunofluorescent analysis of PFA-fixed/Triton X-100 permeabilized U-2 OS cells labeling THOC5 with ab221049 at 4 μ g/ml (green).



Western blot - Anti-THOC5 antibody (ab221049)

Anti-GPCR GPR40 antibody (<u>ab211049</u>) at 1/100 dilution + RT4 cell lysate

Predicted band size: 79 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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