abcam

Product datasheet

Anti-PUF60/FIR antibody ab225705

3 Images

Overview

Product name Anti-PUF60/FIR antibody

Description Rabbit polyclonal to PUF60/FIR

Host species Rabbit

Tested applications Suitable for: WB, IP, IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Orangutan

Immunogen Synthetic peptide within Human PUF60/FIR aa 1-50. The exact sequence is proprietary.

(NP_510965.1).

Database link: Q9UHX1

Positive control IHC-P: Human lung carcinoma tissue. WB: HeLa and HEK-293T whole cell lysates. IP: HeLa

whole cell lysate (ab150035).

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: 6.8

Preservative: 0.09% Sodium azide

Constituents: 0.1% BSA, Tris buffered saline

Purity Immunogen affinity purified

Purification notes ab225705 was affinity purified using an epitope specific to PUF60/FIR immobilized on solid

support.

Clonality Polyclonal

1

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab225705 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
WB		1/2000 - 1/10000. Predicted molecular weight: 60 kDa.
IP		Use at 2-5 µg/mg of lysate.
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

DNA- and RNA-binding protein, involved in several nuclear processes such as pre-mRNA splicing, apoptosis and transcription regulation. In association with FUBP1 regulates MYC transcription at the P2 promoter through the core-TFIIH basal transcription factor. Acts as a transcriptional repressor through the core-TFIIH basal transcription factor. Represses FUBP1-induced transcriptional activation but not basal transcription. Decreases ERCC3 helicase activity. Does not repress TFIIH-mediated transcription in xeroderma pigmentosum complementation group B (XPB) cells. Is also involved in pre-mRNA splicing. Promotes splicing of an intron with weak 3'-splice site and pyrimidine tract in a cooperative manner with U2AF2. Involved in apoptosis induction when overexpressed in HeLa cells. Isoform 6 failed to repress MYC transcription and inhibited FIR-induced apoptosis in colorectal cancer. Isoform 6 may contribute to tumor progression by enabling increased MYC expression and greater resistance to apoptosis in tumors than in normal cells. Modulates alternative splicing of several mRNAs. Binds to relaxed DNA of active promoter regions. Binds to the pyrimidine tract and 3'-splice site regions of pre-mRNA; binding is enhanced in presence of U2AF2. Binds to Y5 RNA in association with TROVE2. Binds to poly(U) RNA.

Tissue specificity

Isoform 2 is expressed in colonic epithelium and colorectal epithelium cancer (at protein level). Isoform 6 is expressed in colorectal epithelial cancer but below detection level in colonic epithelium. Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes.

Sequence similarities

Belongs to the RRM half pint family.

Contains 3 RRM (RNA recognition motif) domains.

Domain

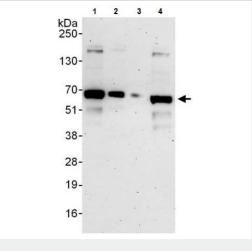
The third RNA recognition motif, called PUMP domain, is atypical and may rather mediate

homodimerization and/or protein-protein interactions.

Cellular localization

Nucleus. Colocalizes partially with TROVE2.

Images



Western blot - Anti-PUF60/FIR antibody (ab225705)

All lanes: Anti-PUF60/FIR antibody (ab225705) at 0.04 µg/ml

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 50 μg

Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 15 μg

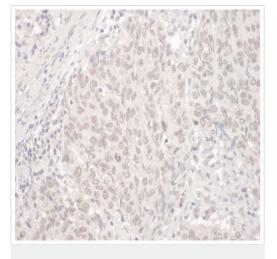
Lane 3: HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 5 µg

Lane 4: HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 50 µg

Developed using the ECL technique.

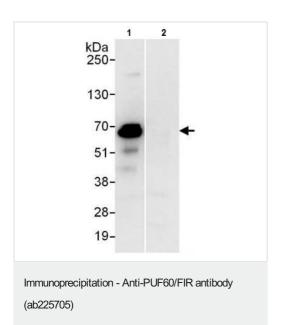
Predicted band size: 60 kDa

Exposure time: 3 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PUF60/FIR antibody (ab225705)

Formalin-fixed, paraffin-embedded human lung carcinoma tissue stained for PUF60/FIR using ab225705 at 1/200 dilution in immunohistochemical analysis. Detection: DAB staining.



PUF60/FIR was immunoprecipitated from HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate (1 mg for IP, 20% of IP loaded) with ab225705 at 3 μ g/mg lysate. Western blot was performed from the immunoprecipitate using ab225705 at 0.4 μ g/ml.

Lane 1: ab225705 IP in HeLa whole cell lysate.

Lane 2: Control IgG IP in HeLa whole cell lysate.

Detection: Chemiluminescence with exposure time of 10 seconds.

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