# abcam

# Product datasheet

# Anti-RBP-2 antibody ab157096

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Overview

Product name Anti-RBP-2 antibody

**Description** Rabbit polyclonal to RBP-2

Host species Rabbit

**Tested applications** Suitable for: WB, IP

Species reactivity Reacts with: Mouse, Human

Predicted to work with: Rabbit, Horse, Guinea pig, Pig, Chimpanzee, Ferret, Non human

primates, Rhesus monkey, Gorilla, Orangutan, Elephant

**Immunogen** Synthetic peptide corresponding to Human RBP-2 aa 344-394.

Database link: **NP\_115553.2** 

Positive control 293T, HeLa, Jurkat and NIH3T3 whole cell lysates

**General notes**The 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.

**Storage buffer** pH: 7

Preservative: 0.09% Sodium azide Constituent: 99% Tris citrate/phosphate

pH 7-8

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

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### **Applications**

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab157096 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: 44 kDa.
IP		Use at 2-10 µg/mg of lysate.

## **Target**

#### **Function**

A phosphoprotein adapter involved in the XPO1-mediated U snRNA export from the nucleus. Bridge components required for U snRNA export, the cap binding complex (CBC)-bound snRNA on the one hand and the GTPase Ran in its active GTP-bound form together with the export receptor XPO1 on the other. Its phosphorylation in the nucleus is required for U snRNA export complex assembly and export, while its dephosphorylation in the cytoplasm causes export complex disassembly. It is recycled back to the nucleus via the importin alpha/beta heterodimeric import receptor. The directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Its compartmentalized phosphorylation cycle may also contribute to the directionality of export. Binds strongly to m7G-capped U1 and U5 small nuclear RNAs (snRNAs) in a sequence-unspecific manner and phosphorylation-independent manner (By similarity). Plays also a role in the biogenesis of U3 small nucleolar RNA (snoRNA). Involved in the U3 snoRNA transport from nucleoplasm to Cajal bodies. Binds strongly to m7G-capped U3, U8 and U13 precursor snoRNAs and weakly to trimethylated (TMG)-capped U3, U8 and U13 snoRNAs. Binds also to telomerase RNA.

## Sequence similarities

Post-translational modifications

Belongs to the PHAX family.

Phosphorylated in the nucleus. Dephosphorylated in the cytoplasm (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR.

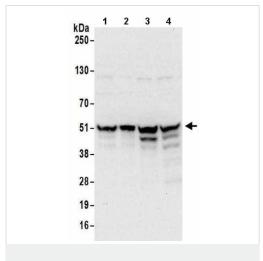
Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization

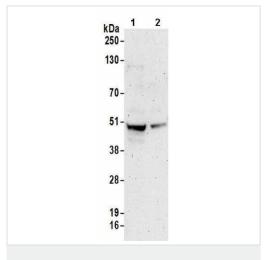
Nucleus > nucleoplasm. Nucleus > Cajal body. Cytoplasm. Located in the nucleoplasm and Cajal bodies. Shuttles between the nucleus and the cytoplasm. Shuttles between the nucleoplasm and

Cajal bodies.

# **Images**



Western blot - Anti-RBP-2 antibody (ab157096)



Western blot - Anti-RBP-2 antibody (ab157096)

All lanes: Anti-RBP-2 antibody (ab157096) at 0.1 µg/ml

Lane 1: 293T whole cell lysate at 50 μg Lane 2: 293T whole cell lysate at 15 μg Lane 3: HeLa whole cell lysate at 50 μg Lane 4: Jurkat whole cell lysate at 50 μg

Developed using the ECL technique.

Predicted band size: 44 kDa

Exposure time: 10 seconds

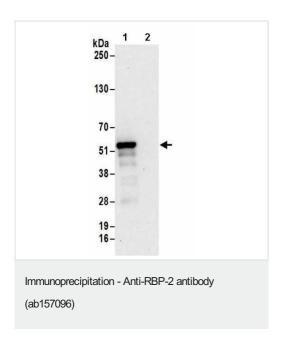
All lanes: Anti-RBP-2 antibody (ab157096) at 0.4 µg/ml

**Lane 1 :** NIH3T3 whole cell lysate at 50 μg **Lane 2 :** NIH3T3 whole cell lysate at 15 μg

Developed using the ECL technique.

Predicted band size: 44 kDa

Exposure time: 3 minutes



Immunoprecipitation. ab157096 at 0.1  $\mu$ g/ml staining by Western blot RBP-2 in 293T whole cell lysate immunoprecipitated using ab157096 at 6  $\mu$ g/mg lysate (1 mg/IP; 20% of IP loaded/lane).

Lane 2: control lgG.

Predicted band size : 44 kDa. Exposure time: 10 seconds

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

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