

Product datasheet

Anti-FMRP antibody ab109741

★★★★★ 1 Abreviews 3 Images

Overview

Product name	Anti-FMRP antibody
Description	Goat polyclonal to FMRP
Host species	Goat
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Rabbit, Human, Gorilla Predicted to work with: Mouse, Rat, Cow, Dog, Pig ⚠ Does not react with: Chicken
Immunogen	Synthetic peptide: C- NPNKPATKDTFHKIK , corresponding to internal sequence amino acids 116-130 of Human FMRP (NP_002015.1). Run BLAST with Run BLAST with

General notes

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as 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.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab109741** 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		Use a concentration of 0.3 - 1 µg/ml. Predicted molecular weight: 71 kDa.
IHC-P	★★★★★	Use a concentration of 2.5 µg/ml.

Target

Function
Translation repressor. Component of the CYFIP1-EIF4E-FMR1 complex which binds to the mRNA cap and mediates translational repression. In the CYFIP1-EIF4E-FMR1 complex this subunit mediates translation repression (By similarity). RNA-binding protein that plays a role in intracellular RNA transport and in the regulation of translation of target mRNAs. Associated with polysomes. May play a role in the transport of mRNA from the nucleus to the cytoplasm. Binds strongly to poly(G), binds moderately to poly(U) but shows very little binding to poly(A) or poly(C).

Tissue specificity
Highest levels found in neurons, brain, testis, placenta and lymphocytes. Also expressed in epithelial tissues and at very low levels in glial cells.

Involvement in disease
Defects in FMR1 are the cause of fragile X syndrome (FRAX) [MIM:300624]. Fragile X syndrome is a common genetic disease (has a prevalence of one in every 2000 children) which is characterized by moderate to severe mental retardation, macroorchidism (enlargement of the testicles), large ears, prominent jaw, and high-pitched, jocular speech. The defect in most fragile X syndrome patients results from an amplification of a CGG repeat region which is directly in front of the coding region.

Defects in FMR1 are the cause of fragile X tremor/ataxia syndrome (FXTAS) [MIM:300623]. In FXTAS, the expanded repeats range in size from 55 to 200 repeats and are referred to as 'premutations'. Full repeat expansions with greater than 200 repeats results in fragile X mental retardation syndrome [MIM:300624]. Carriers of the premutation typically do not show the full fragile X syndrome phenotype, but comprise a subgroup that may have some physical features of fragile X syndrome or mild cognitive and emotional problems.

Defects in FMR1 are the cause of premature ovarian failure syndrome type 1 (POF1) [MIM:311360]. An ovarian disorder defined as the cessation of ovarian function under the age of 40 years. It is characterized by oligomenorrhea or amenorrhea, in the presence of elevated levels of serum gonadotropins and low estradiol.

Sequence similarities

Belongs to the FMR1 family.

Contains 2 KH domains.

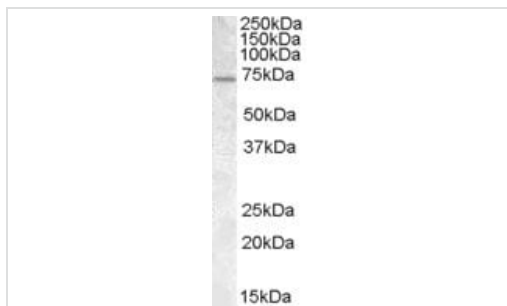
Post-translational modifications

Phosphorylated on several serine residues.

Cellular localization

Cytoplasm. Nucleus > nucleolus.

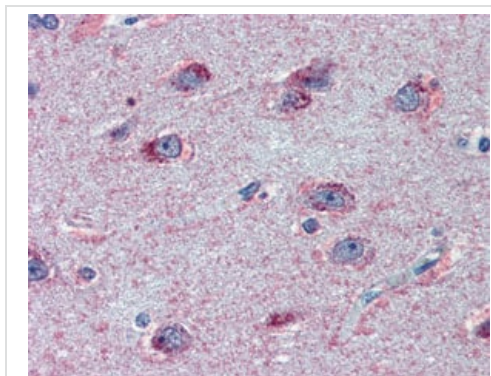
Images



Western blot - Anti-FMRP antibody (ab109741)

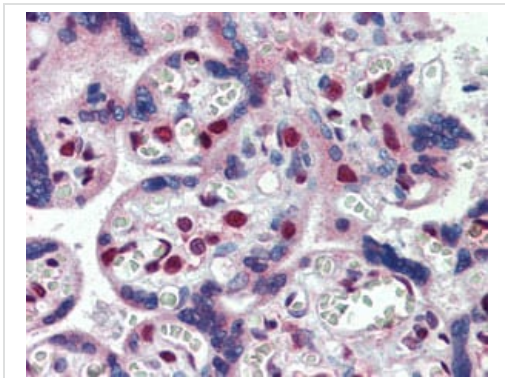
Anti-FMRP antibody (ab109741) at 0.3 $\mu\text{g/ml}$ + HeLa lysate in RIPA buffer at 35 μg

Predicted band size: 71 kDa



ab109741 at 2.5 $\mu\text{g/ml}$ staining FMRP in Human Brain, cortex by Immunohistochemistry Formalin-fixed, Paraffin-embedded tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FMRP antibody (ab109741)



ab109741 at 2.5 µg/ml staining FMRP in Human placenta by Immunohistochemistry Formalin-fixed, Paraffin-embedded tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FMRP antibody (ab109741)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors