abcam

Product datasheet

Recombinant Human FMRP protein ab132093

1 Image

Description

Product name	Recombinant Human FMRP protein
Expression system	Wheat germ
Accession	Q8IXW7
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MEELVVEVRGSNGAFYKAFVKDVHEDSITVAFENNWQPD RQIPFHDVRFP PPVGYNKDINESDEVEVYSRANEKEPCCWWLAKVRMIKG EFYVIEYAACD ATYNEIVTIERLRSVNPNKPATKDTFHKIKLDVPEDLRQMC AKEAAHKDF KKAVGAFSVTYDPENYQLVILSINEVTSKRAHMLIDMHFRS LRTKLSLIM RNEEASKQLESSRQLASRFHEQFIVREDLMGLAIGTHGANI QQARKVPGV TAIDLDEDTCTFHIYGEDQDAVKKARSFLEFAEDVIQVPRN LVGLKI
Predicted molecular weight	58 kDa including tags
Amino acids	1 to 297
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab132093** in the following tested applications.

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

Applications	Western blot
	SDS-PAGE
	ELISA
Form	Liquid

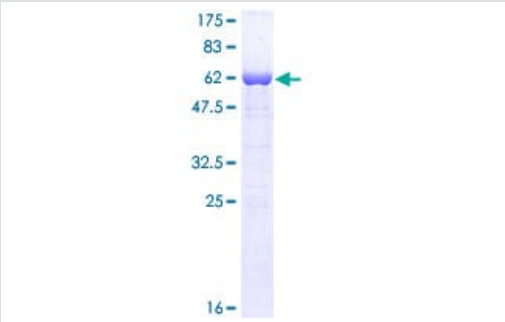
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

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



SDS-PAGE - Recombinant Human FMRP protein (ab132093)

12.5% SDS-PAGE analysis of ab132093 stained with Coomassie Blue.

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