



# Rabbit Anti-FMR1 monoclonal antibody, clone KN02-52 (CABT-L934)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Target</b>	FMRP
<b>Immunogen</b>	Recombinant protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Clone</b>	KN02-52
<b>Purification</b>	Protein A purified.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, ICC/IF, IHC
<b>Cellular Localization</b>	Cytoplasm. Nucleus.
<b>Positive Control</b>	HeLa, HepG2, K562, SH-SY5Y, human tonsil tissue, mouse colon tissue, rat brain tissue.
<b>Format</b>	Liquid
<b>Size</b>	100 µl
<b>Buffer</b>	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
<b>Preservative</b>	0.05% Sodium Azide
<b>Storage</b>	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

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## BACKGROUND

### Introduction

Fragile X syndrome is the most frequent form of inherited mental retardation and is the result of transcriptional silencing of the FMR1 gene on the X chromosome. The FMR1 gene contains a distinct CpG dinucleotide repeat located in the 5' untranslated region of the gene. In fragile X syndrome this tandem repeat is substantially amplified and subjected to extensive methylation and enhanced transcriptional silencing. The FMR1 protein (or FMRP) is an RNA-binding protein that associates with polyribosomes and is a likely component of a messenger ribonuclear protein (mRNP) particle. It contains several features that are characteristics of RNA-binding proteins, including two hnRNP K homology (KH) domains and an RGG amino acid motif (RGG box). FMR1 localizes to both the nucleus and the cytoplasm and can also interact with two fragile X syndrome related factors, FXR1 and FXR2, which form heterodimers through their N-terminal coiled-coil domains. Since FMR1 contains both a nuclear localization signal and a nuclear export signal it is also implicated in the nucleocytoplasmic transport of mRNAs.

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### Keywords

FMR 1;Fmr1;Fmr1 gene;FMR1\_HUMAN;FMRP;Fragile X mental retardation 1;Fragile X mental retardation 1 protein;Fragile X mental retardation protein 1;Fragile X mental retardation protein;fragile X mental retardation syndrome-related protein 1;fragile X mental retardation, autosomal homolog 1;FRAXA;fxr1;MGC87458;POF;POF1;Protein FMR-1;Protein FMR1;wu:fb16f11;wu:fd18c10;zgc:66226 antibody

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