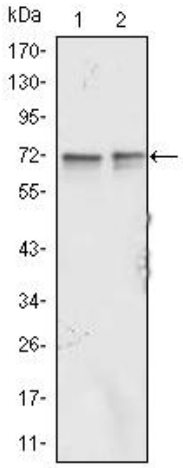
FMR1 Monoclonal Antibody

Catalog No	YP-mAb-00976
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	FMR1
Immunogen	Purified recombinant fragment of human FMR1 expressed in E. Coli.
Specificity	FMR1 Monoclonal Antibody detects endogenous levels of FMR1 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	FMR1;fragile X mental retardation 1;Fragile X messenger ribonucleoprotein; Fragile X messenger ribonucleoprotein 1;Fragile X mental retardation 1 protein; Fragile X mental retardation protein 1;FMRP;Protein FMR-1
Calculated Molecular Weight	71kD
Cell Pathway	Nucleus . Nucleus, nucleolus . Chromosome, centromere . Chromosome . Cytoplasm . Cytoplasm, perinuclear region . Cytoplasm, Cytoplasmic ribonucleoprotein granule . Perikaryon . Cell projection, neuron projection . Cell projection, axon . Cell projection, dendrite . Cell projection, dendritic spine . Cell junction, synapse, synaptosome . Cell projection, growth cone . Cell projection, filopodium tip . Cell junction, synapse . Cell junction, synapse, postsynaptic cell membrane . Cell junction, synapse, presynaptic cell membrane . Cell membrane . Cytoplasm, Stress granule . Colocalizes with H2AX/H2A.x in pericentromeric heterochromatin in response to DNA damaging agents (By similarity). Localizes on meiotic pachytene-stage chromosomes (By similarity). Forms nuclear foci representing sites of
Tissue Specificity	Expressed in the brain, cerebellum and testis (PubMed:8401578). Also expressed in epithelial tissues (PubMed:8401578). Expressed in mature oligodendrocytes (OLGs) (PubMed:23891804). Expressed in fibroblast (PubMed:24204304). Expressed in neurons, Purkinje cells and spermatogonias (at protein level) (PubMed:8401578). Expressed in brain, testis and placenta (PubMed:8504300). Expressed in neurons and lymphocytes (PubMed:8504300).

Function	alternative products:At least 12 different isoforms are produced,disease:Defects in FMR1 are the cause of fragile X syndrome. [MIM:300624]. It 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.,disease: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 d
Background	The protein encoded by this gene binds RNA and is associated with polysomes. The encoded protein may be involved in mRNA trafficking from the nucleus to the cytoplasm. A trinucleotide repeat (CGG) in the 5' UTR is normally found at 6-53 copies, but an expansion to 55-230 repeats is the cause of fragile X syndrome. Expansion of the trinucleotide repeat may also cause one form of premature ovarian failure (POF1). Multiple alternatively spliced transcript variants that encode different protein isoforms and which are located in different cellular locations have been described for this gene. [provided by RefSeq, May 2010],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using FMR1 Monoclonal Antibody against Jurkat (1) and K562 (2) cell lysate.