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FMR1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant FMR1.
Catalog # AT2078a

Specification

FMR1 Antibody (monoclonal) (M01) - Product Information

Application	**WB, E**
Primary Accession	Q06787
Other Accession	NM_002024
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG1 Kappa**
Calculated MW	**71174**

FMR1 Antibody (monoclonal) (M01) - Additional Information

Gene ID 2332

Other Names
Fragile X mental retardation protein 1, FMRP, Protein FMR-1, FMR1

Target/Specificity
FMR1 (NP_002015, 121 a.a. ~ 220 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution
WB~~1:500~1000

Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
FMR1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

FMR1 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

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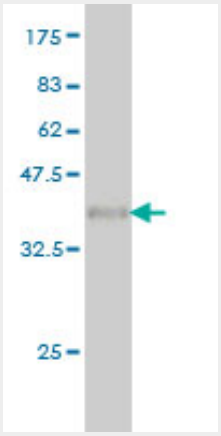
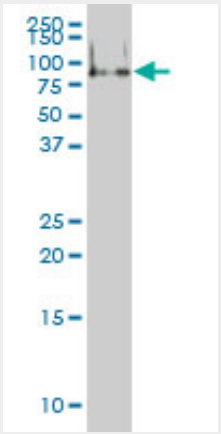
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

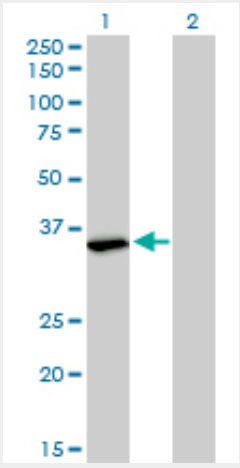
FMR1 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



FMR1 monoclonal antibody (M01), clone 2D4 Western Blot analysis of FMR1 expression in HepG2 ((Cat # AT2078a)



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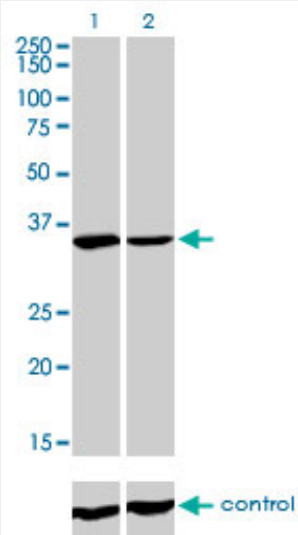
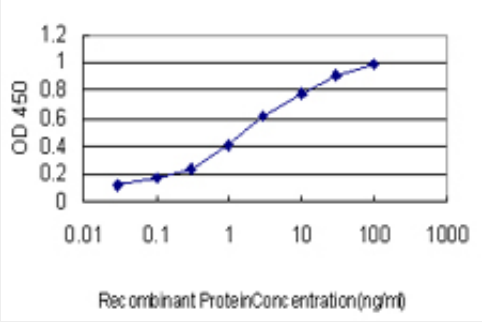
Western Blot analysis of FMR1 expression in transfected 293T cell line by FMR1 monoclonal antibody (M01), clone 2D4.

Lane 1: FMR1 transfected lysate(34.1 KDa).
Lane 2: Non-transfected lysate.



Western blot analysis of FMR1 over-expressed 293 cell line, cotransfected with FMR1 Validated Chimera RNAi ((Cat # AT2078a)



Detection limit for recombinant GST tagged FMR1 is approximately 0.1ng/ml as a capture antibody.

FMR1 Antibody (monoclonal) (M01) - 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.

FMR1 Antibody (monoclonal) (M01) - References

An information-rich CGG repeat primed PCR that detects the full range of fragile X expanded alleles and minimizes the need for southern blot analysis. Chen L, et al. J Mol Diagn, 2010 Sep. PMID 20616364.Genetic diversity of the fragile X syndrome gene (FMR1) in a large Sub-Saharan West African population. Peprah EK, et al. Ann Hum Genet, 2010 Jul. PMID 20597902.An fMRI study of the

prefrontal activity during the performance of a working memory task in premutation carriers of the fragile X mental retardation 1 gene with and without fragile X-associated tremor/ataxia syndrome (FXTAS). Hashimoto RI, et al. J Psychiatr Res, 2010 May 26. PMID 20537351.hnRNP C promotes APP translation by competing with FMRP for APP mRNA recruitment to P bodies. Lee EK, et al. Nat Struct Mol Biol, 2010 Jun. PMID 20473314.A simple, high-throughput assay for Fragile X expanded alleles using triple repeat primed PCR and capillary electrophoresis. Lyon E, et al. J Mol Diagn, 2010 Jul. PMID 20431035.