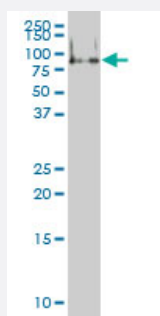


# FMR1 monoclonal antibody (M01), clone 2D4

Catalog # H00002332-M01

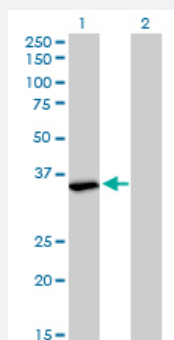
Size 100 ug

## Applications



### Western Blot (Cell lysate)

FMR1 monoclonal antibody (M01), clone 2D4 Western Blot analysis of FMR1 expression in HepG2 ( Cat # L019V1 ).

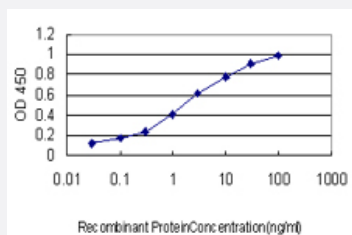


### Western Blot (Transfected lysate)

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

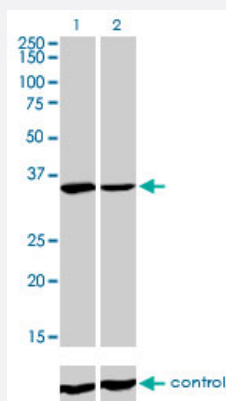
Lane 1: FMR1 transfected lysate(34.1 KDa).

Lane 2: Non-transfected lysate.



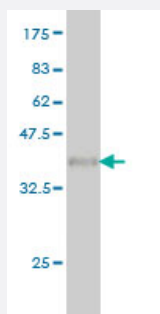
### Sandwich ELISA (Recombinant protein)

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



## RNAi Knockdown (Antibody validated)

Western blot analysis of FMR1 over-expressed 293 cell line, cotransfected with FMR1 Validated Chimera RNAi ( Cat # H00002332-R01V ) (Lane 2) or non-transfected control (Lane 1). Blot probed with FMR1 monoclonal antibody (M01), clone 2D4 (Cat # H00002332-M01 ). GAPDH ( 36.1 kDa ) used as specificity and loading control.



Western Blot detection against Immunogen (36.74 KDa) .

## Specification

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>     | Mouse monoclonal antibody raised against a partial recombinant FMR1.                                              |
| <b>Immunogen</b>               | FMR1 (NP_002015, 121 a.a. ~ 220 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| <b>Sequence</b>                | ATKDTFHKIKLDVPEDLRQMCAKEAAHKDFKKAVGAFSVTYDPENYQLVILSINEVTSKRAHMLID<br>MHFRSLRTKLSLIMRNEEASKQLESSRQLASRFH          |
| <b>Host</b>                    | Mouse                                                                                                             |
| <b>Reactivity</b>              | Human                                                                                                             |
| <b>Isotype</b>                 | IgG1 Kappa                                                                                                        |
| <b>Quality Control Testing</b> | Antibody Reactive Against Recombinant Protein.<br>Western Blot detection against Immunogen (36.74 KDa) .          |
| <b>Storage Buffer</b>          | In 1x PBS, pH 7.4                                                                                                 |
| <b>Storage Instruction</b>     | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.                                          |

## Applications

- Western Blot (Cell lysate)

FMR1 monoclonal antibody (M01), clone 2D4 Western Blot analysis of FMR1 expression in HepG2 ( Cat # L019V1 ).

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- Western Blot (Transfected lysate)

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.

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- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

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

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- ELISA

- RNAi Knockdown (Antibody validated)

Western blot analysis of FMR1 over-expressed 293 cell line, cotransfected with FMR1 Validated Chimera RNAi ( Cat # H00002332-R01V ) (Lane 2) or non-transfected control (Lane 1). Blot probed with FMR1 monoclonal antibody (M01), clone 2D4 (Cat # H00002332-M01 ). GAPDH ( 36.1 kDa ) used as specificity and loading control.

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## Gene Info — FMR1

Entrez GeneID [2332](#)

GeneBank Accession# [NM\\_002024](#)

Protein Accession# [NP\\_002015](#)

Gene Name FMR1

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene Alias         | FMRP, FRAXA, MGC87458, POF, POF1                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gene Description   | fragile X mental retardation 1                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Omim ID            | <a href="#">300623</a> <a href="#">300624</a> <a href="#">309550</a>                                                                                                                                                                                                                                                                                                                                                                                |
| Gene Ontology      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Gene Summary       | 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). [provided by RefSeq] |
| Other Designations | OTTHUMP00000024197 premature ovarian failure 1                                                                                                                                                                                                                                                                                                                                                                                                      |

## Publication Reference

- [Splicing of exon 9a in FMR1 transcripts results in a truncated FMRP with altered subcellular distribution.](#)

Fu XG, Yan AZ, Xu YJ, Liao J, Guo XY, Zhang D, Yang WJ, Zheng DZ, Lan FH.

Gene 2020 Mar; 731:144359.

Application: IF, WB-Tr, Human, HeLa, HEK 293T cells

## Disease

- [Ataxia](#)
- [Ataxia telangiectasia](#)
- [Attention](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Cerebellar Ataxia](#)
- [Cognition](#)
- [Cognition Disorders](#)
- [Dementia](#)
- [Disease Progression](#)

- [Essential tremor](#)
- [Fetal Diseases](#)
- [Fragile X syndrome](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)
- [Hallucinations](#)
- [Huntington disease](#)
- [Infertility](#)
- [Inhibition \(Psychology\)](#)
- [Intelligence Tests](#)
- [Memory](#)
- [Menopause](#)
- [Mental Disorders](#)
- [Mental Processes](#)
- [Mental Retardation](#)
- [Mental Status Schedule](#)
- [Multiple System Atrophy](#)
- [Neuropsychological Tests](#)
- [Obesity](#)
- [Olivopontocerebellar Atrophies](#)
- [Osteoporosis](#)
- [Ovarian Diseases](#)
- [Ovarian Failure](#)
- [Parkinson disease](#)
- [Parkinsonian Disorders](#)
- [Polycystic Ovary Syndrome](#)

- [Primary Ovarian Insufficiency](#)
- [Psychotic Disorders](#)
- [Puberty](#)
- [Reaction Time](#)
- [Schizophrenia](#)
- [Spinocerebellar ataxia](#)
- [Spinocerebellar Ataxias](#)
- [Spinocerebellar Degenerations](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Tremor](#)