

#4173 Store at -20°C

FXR1 Antibody



✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #8087
Swiss-Prot Acc. #P51114

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk	78-80, 82-84 kDa	Rabbit**

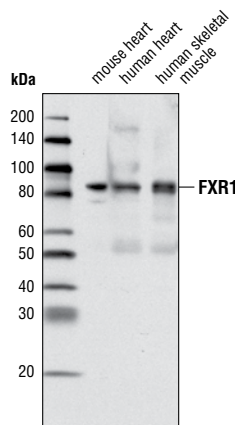
Background: Fragile X syndrome is a genetic disorder characterized by a spectrum of physical and behavioral features and is a frequent form of inherited mental retardation (1). The X-linked FMRP (FMR-1) and its two autosomal homologs, FXR1 and FXR2, are polyribosome-associated RNA-binding proteins that are involved in the pathogenesis of fragile X syndrome (1-3). Each of the fragile X proteins can self-associate as well as form heteromers with the other two related proteins (3). FMRP can act as a translation regulator and is a component of RNAi effector complexes (RISC), suggesting a role in gene silencing (4). The *Drosophila* homolog of FMRP (dFMRP) associates with Argonaute2 (Ago2) and Dicer and can coimmunoprecipitate with miRNA and siRNA (5). These results suggest that fragile X syndrome is related to abnormal translation caused by defects in RNAi-related pathways.

Specificity/Sensitivity: FXR1 Antibody detects endogenous levels of total FXR1 protein.

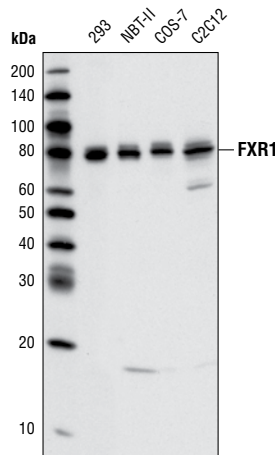
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human FXR1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Verkerk, A.J. et al. (1991) *Cell* 65, 905-14.
- (2) Siomi, M.C. et al. (1995) *EMBO J* 14, 2401-8.
- (3) Zhang, Y. et al. (1995) *EMBO J* 14, 5358-66.
- (4) Caudy, A.A. et al. (2002) *Genes Dev* 16, 2491-6.
- (5) Siomi, H. et al. (2004) *Ment Retard Dev Disabil Res Rev* 10, 68-74.



Western blot analysis of extracts from mouse heart, human heart and human skeletal muscle tissue using FXR1 Antibody.



Western blot analysis of various cell lines using FXR1 Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols, please see the web page for this product at www.cellsignal.com

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide

Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.