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FXR1 Antibody


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| Applications: WB | Reactivity: H M R Mk | Sensitivity: Endogenous | MW (kDa): 78-80, 82-84 | Source: Rabbit | UniProt ID: #P51114 | Entrez-Gene Id: 8087 |
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| Product Usage Information | Application Western Blotting | Dilution 1:1000 |
| 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. | |
| 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 | 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). 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 <i>Drosophila</i> homolog of FMRP (dFMRP) associates with Argonaute 2 (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. In addition, FMRP, FXR1, and FXR2 are components of stress granules (SG) and have been implicated in the translational regulation of mRNAs (6). | |
| Background References | 1. Verkerk, A.J. et al. (1991) <i>Cell</i> 65, 905-14. 2. Siomi, M.C. et al. (1995) <i>EMBO J</i> 14, 2401-8. 3. Zhang, Y. et al. (1995) <i>EMBO J</i> 14, 5358-66. 4. Caudy, A.A. et al. (2002) <i>Genes Dev</i> 16, 2491-6. 5. Siomi, H. et al. (2004) <i>Ment Retard Dev Disabil Res Rev</i> 10, 68-74. 6. Linder, B. et al. (2008) <i>Hum Mol Genet</i> 17, 3236-46. | |

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| Species Reactivity | Species reactivity is determined by testing in at least one approved application (e.g., western blot). |
| Western Blot Buffer | IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight. |
| Applications Key | WB: Western Blotting |
| Cross-Reactivity Key | H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus 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 GP: Guinea Pig Rab: rabbit All: all species expected |
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