



## Monoclonal anti-FXR1P (encoded by FXR1 gene, FMRP homologue)

**NB-01-0039**

**Volume:** 100 µl

**Clones:** 3FX 2B12

**Immunogen:** LKDPDSNPYSLLDNTESDQT-(C) a synthetic peptide corresponding to residues 469 to 488 of FXR1 coupled to ovalbumin. (numbering depends on isoform). This peptide sequence is totally conserved (100% identity) in mouse, dog, rat, bovine, chicken, frog (*Xenopus laevis* and *tropicalis*), and 90% identical in zebra fish (*Dario rerio*)

**Murine Isotype:** IgG1, k

**Specificity:** FXR1 (Fragile X related 1) protein from human, mouse, *Xenopus laevis* (expected also in chicken). Detects all 7 isoforms (from 70 to 84 kDa, including muscle specific isoforms of 82 and 84 kDa). Slightly cross react to FXR2P (at 94 kDa in WB, Khandjian et al 1998), but this appears undetectable by immunohistochemistry in FXR1 KO mouse (Mientjes et al. 2004)

### Applications:

- ELISA
- Western Blot
- Immunocytochemistry
- Immunohistochemistry
- immunoprecipitation

**Recommended dilutions:** 1/500-1/5000

### Storage:

Store at -20°C (up to 3 years)

Avoid repeat freezing and thawing cycles. Does not contain any preservative

### References:

Huot ME, Bisson N, Davidovic L, Mazroui R, Labelle Y, Moss T, Khandjian EW. The RNA-binding Protein Fragile X-related 1 Regulates Somite Formation in *Xenopus laevis*. *Mol Biol Cell*. 2005 Sep;16(9):4350-61.

Mientjes EJ, Willemsen R, Kirkpatrick LL, Nieuwenhuizen IM, Hoogeveen-Westerveld M, Verweij M, Reis S, Bardoni B, Hoogeveen AT, Oostra BA, Nelson DL. *Fxr1* knockout mice show a striated muscle phenotype: implications for *Fxr1p* function in vivo. *Hum Mol Genet*. 2004 Jul 1;13(13):1291-302.

Huot ME, Mazroui R, Leclerc P, Khandjian EW. Developmental expression of the fragile X-related 1 proteins in mouse testis: association with microtubule elements. *Hum Mol Genet*. 2001 Nov 15;10(24):2803-11.

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Dube M, Huot ME, Khandjian EW. Muscle specific fragile X related protein 1 isoforms are sequestered in the nucleus of undifferentiated myoblast. *BMC Genet.* 2000;1(1):4.

Khandjian EW, Bardoni B, Corbin F, Sittler A, Giroux S, Heitz D, Tremblay S, Pinset C, Montarras D, Rousseau F, Mandel J. Novel isoforms of the fragile X related protein FXR1P are expressed during myogenesis. *Hum Mol Genet.* 1998 Dec;7(13):2121-8.