

Anti-FXR2 Antibody

Catalog # AP51218

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P51116
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	74223

Additional Information

Gene ID	9513
Other Names	FMR1L2; Fragile X mental retardation syndrome-related protein 2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human FXR2. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	FXR2 {ECO:0000303 PubMed:7489725, ECO:0000312 HGNC:HGNC:4024}
Function	mRNA-binding protein that acts as a regulator of mRNAs translation and/or stability, and which is required for adult hippocampal neurogenesis (By similarity). Specifically binds to AU-rich elements (AREs) in the 3'-UTR of target mRNAs (By similarity). Promotes formation of some phase-separated membraneless compartment by undergoing liquid-liquid phase separation upon binding to AREs- containing mRNAs: mRNAs storage into membraneless compartments regulates their translation and/or stability (By similarity). Acts as a regulator of adult hippocampal neurogenesis by regulating translation and/or stability of NOG mRNA, thereby preventing NOG protein expression in the dentate gyrus (By similarity).
Cellular Location	Cytoplasm, Cytoplasmic ribonucleoprotein granule {ECO:0000250 UniProtKB:Q61584}. Cytoplasm Postsynapse {ECO:0000250 UniProtKB:Q9WVR4}. Note=Specifically localizes to cytoplasmic ribonucleoprotein membraneless compartments (By similarity). Localization to the post-synaptic region is dependent on FMR1 (By similarity).

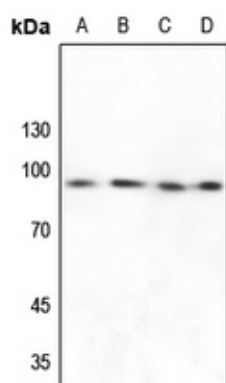
Tissue Location

Expressed in all tissues examined including heart, brain, kidney and testis (PubMed:9259278). In brain, present at high level in neurons and especially in the Purkinje cells at the interface between the granular layer and the molecular layer (at protein level) (PubMed:9259278).

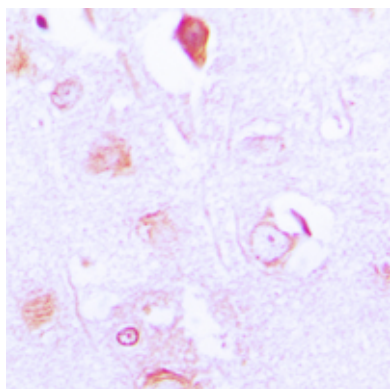
References

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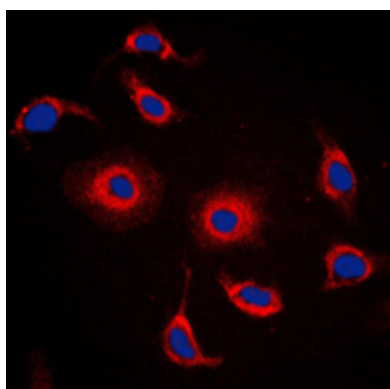
Images



Western blot analysis of FXR2 expression in HEK293T (A), Hela (B), A549 (C), mouse testis (D) whole cell lysates. (Predicted band size: 74 kD; Observed band size: 90 kD)



Immunohistochemical analysis of FXR2 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of FXR2 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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