**FXR (D-3): sc-25309**

**BACKGROUND**

The steroid receptor superfamily acts through direct association with DNA sequences known as hormone response elements (HREs) and binds DNA as either homo- or heterodimers. The promiscuous mediator of heterodimerization, RXR, is the receptor for 9-cis retinoic acid, and dimerizes with VDR, TR, PPAR, and several novel receptors including LXR (also referred to as RLD-1) and FXR. FXR and LXR fall into a category of proteins termed “orphan receptors” because of their lack of a defined function, and in the case of LXR, the lack of a defined ligand. FXR has been shown to bind a class of lipid molecules called farnesoids. LXR/RXR heterodimers have highest affinity for DR-4 DNA elements while FXR/RXR heterodimers bind IR-1 elements. Both LXR/RXR and FXR/RXR heterodimers retain their responsiveness to 9-cis retinoic acid.

**CHROMOSOMAL LOCATION**

Genetic locus: NR1H4 (human) mapping to 12q23.1; Nr1h4 (mouse) mapping to 10 C2.

**SOURCE**

FXR (D-3) is a mouse monoclonal antibody raised against amino acids 1-130 of FXR of human origin.

**PRODUCT**

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-25309 X, 200 µg/0.1 ml.

FXR (D-3) is available conjugated to agarose (sc-25309 AC), 500 µg/0.25 ml agarose in 1 ml, for IP, to HRP (sc-25309 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-25309 PE), fluorescein (sc-25309 FITC), Alexa Fluor<sup>®</sup> 488 (sc-25309 AF488), Alexa Fluor<sup>®</sup> 546 (sc-25309 AF546), Alexa Fluor<sup>®</sup> 594 (sc-25309 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-25309 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-25309 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-25309 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

FXR (D-3) is recommended for detection of FXR of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1,000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FXR siRNA (h): sc-38848, FXR siRNA (m): sc-155894, FXR shRNA Plasmid (h): sc-38848-SH, FXR shRNA Plasmid (m): sc-155894-SH, FXR shRNA (h) Lentiviral Particles: sc-38848-V and FXR shRNA (m) Lentiviral Particles: sc-155894-V.

FXR (D-3) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of FXR: 69 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

FXR (D-3): sc-25309. Western blot analysis of GST-tagged human recombinant FXR [A,B].

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

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