

PXR (H-160): sc-25381

BACKGROUND

Steroid hormones function as signaling molecules by diffusing into cells and interacting with specific intracellular receptors to regulate gene expression. This superfamily of receptors includes both steroid and nonsteroid receptors. Like many nonsteroid hormone receptors, PXR (pregnane X receptor) binds as a heterodimer with RXR to a DNA sequence typical of a nonsteroid hormone receptor; however, PXR is activated by several steroids, such as naturally occurring pregnanes and synthetic glucocorticoids and antiglucocorticoids. PXR exists as two alternatively spliced isoforms, PXR.1 and PXR.2. PXR is thought to define a novel steroid hormone signaling pathway that may account for some of the effects of synthetic glucocorticoids and antiglucocorticoids that are not mediated through the classical glucocorticoid receptor signaling pathway.

CHROMOSOMAL LOCATION

Genetic locus: NR1I2 (human) mapping to 3q13.33; Nr1i2 (mouse) mapping to 16 B3.

SOURCE

PXR (H-160) is a rabbit polyclonal antibody raised against amino acids 101-260 of PXR of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as agarose conjugate for immunoprecipitation, sc-25381 AC, 500 µg/0.25 ml agarose in 1 ml.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-25381 X, 200 µg/0.1 ml.

APPLICATIONS

PXR (H-160) is recommended for detection of PXR.1 and PXR.2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

PXR (H-160) is also recommended for detection of PXR.1 and PXR.2 in additional species, including equine.

Suitable for use as control antibody for PXR siRNA (h): sc-44057, PXR siRNA (m): sc-44058, PXR shRNA Plasmid (h): sc-44057-SH, PXR shRNA Plasmid (m): sc-44058-SH, PXR shRNA (h) Lentiviral Particles: sc-44057-V and PXR shRNA (m) Lentiviral Particles: sc-44058-V.

PXR (H-160) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

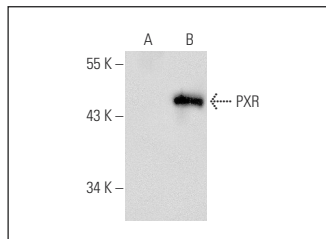
Molecular Weight of PXR: 50 kDa.

Positive Controls: PXR (h): 293 Lysate: sc-158906, COLO320 DM cell lysate: sc-2226 or Hep G2 cell lysate: sc-2227.

STORAGE

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

DATA



PXR (H-160): sc-25381. Western blot analysis of PXR expression in non-transfected: sc-110760 (A) and human PXR transfected: sc-158906 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Ichikawa, T., et al. 2006. Steroid and xenobiotic receptor SXR mediates vitamin K2-activated transcription of extracellular matrix-related genes and collagen accumulation in osteoblastic cells. *J. Biol. Chem.* 281: 16927-16234.
2. Lim, Y.P., et al. 2007. Pregnane X receptor polymorphism affects CYP3A4 induction via a ligand-dependent interaction with steroid receptor coactivator-1. *Pharmacogenet. Genomics* 17: 369-382.
3. Narang, V.S., et al. 2008. Dexamethasone increases expression and activity of multidrug resistance transporters at the rat blood-brain barrier. *Am. J. Physiol., Cell Physiol.* 295: C440-C450.
4. Ni, S., et al. 2008. Effects of intrauterine undernutrition on the expression of CYP3A23/3A1, PXR, CAR and HNF4α in neonate rats. *Biopharm. Drug Dispos.* 29: 501-510.
5. Cui, J.Y., et al. 2010. ChIPing the cistrome of PXR in mouse liver. *Nucleic Acids Res.* 38: 7943-7963.
6. Cui, J.Y., et al. 2010. Genetic and epigenetic regulation and expression signatures of glutathione S-transferases in developing mouse liver. *Toxicol. Sci.* 116: 32-43.
7. Biswas, A., et al. 2011. Acetylation of pregnane X receptor protein determines selective function independent of ligand activation. *Biochem. Biophys. Res. Commun.* 406: 371-376.

RESEARCH USE

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



Try **PXR (G-11): sc-48403** or **PXR (H-11): sc-48340**, our highly recommended monoclonal alternatives to PXR (H-160). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **PXR (G-11): sc-48403**.