

PXR (h): 293 Lysate: sc-158906

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 anti-glucocorticoids. 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.

REFERENCES

1. Evans, R.M. 1988. The steroid and thyroid hormone receptor superfamily. *Science* 240: 889-895.
2. Mangelsdorf, D.J., et al. 1995. The RXR heterodimers and orphan receptors. *Cell* 83: 841-850.
3. Beato, M., et al. 1995. Steroid hormone receptors: many actors in search of a plot. *Cell* 83: 851-857.
4. Huss, J.M., et al. 1996. Dexamethasone responsiveness of a major glucocorticoid-inducible CYP3A gene is mediated by elements unrelated to a glucocorticoid receptor binding motif. *Proc. Natl. Acad. Sci. USA* 93: 4666-4670.
5. Heery, D.M., et al. 1997. A signature motif in transcriptional co-activators mediates binding to nuclear receptors. *Nature* 387: 733-736.
6. Kliewer, S.A., et al. 1998. An orphan receptor activated by pregnanes defines a novel steroid signaling pathway. *Cell* 92: 73-82.

CHROMOSOMAL LOCATION

Genetic locus: NR1I2 (human) mapping to 3q13.33.

PRODUCT

PXR (h): 293 Lysate represents a lysate of human PXR transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

PXR (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive PXR antibodies. Recommended use: 10-20 µl per lane.

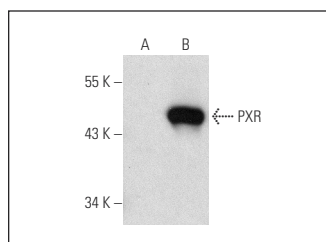
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

PXR (G-11): sc-48403 is recommended as a positive control antibody for Western Blot analysis of enhanced human PXR expression in PXR transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

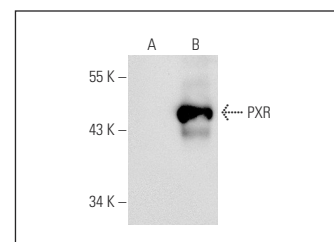
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PXR (G-11): sc-48403. Western blot analysis of PXR expression in non-transfected: sc-110760 (A) and human PXR transfected: sc-158906 (B) 293 whole cell lysates.



PXR (H-11): sc-48340. Western blot analysis of PXR expression in non-transfected: sc-110760 (A) and human PXR transfected: sc-158906 (B) 293 whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.