**BACKGROUND**

Retinoids are metabolites of vitamin A (retinol) and are believed to represent important signaling molecules during vertebrate development and tissue differentiation. The cooperation of liver X receptors (LXRs) α and β and retinoic X receptor (RXR) modulate the expression of several genes involved in lipid metabolism in hepatocyte and macrophages. RXR is the receptor for 9-cis retinoic acid and dimerizes with VDR, TR, PPAR and several novel receptors, including liver X receptors LXRα (also referred to as RLD-1), LXRβ 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. Both LXR/RXR and FXR/RXR heterodimers retain their responsiveness to 9-cis retinoic acid. LXRα and LXRβ share considerable sequence homology and several functions, respond to the same endogenous and synthetic ligands and play critical roles in maintaining lipid homeostasis. LXRβ is ubiquitously expressed and enriched in tissues of neuronal and endocrine origin.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: NR1H3 (human) mapping to 11p11.2, NR1H2 (human) mapping to 19q13.33; Nr1h3 (mouse) mapping to 19q13.33; Nr1h2 (mouse) mapping to 7B4.

**SOURCE**

LXRα/β (G-10) is a mouse monoclonal antibody raised against amino acids 301-444 mapping near the C-terminus of LXRα of human origin.

**PRODUCT**

Each vial contains 200 μg IgG1 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-271064 X, 200 μg/0.1 ml.

LXRα/β (G-10) is available conjugated to agarose (sc-271064 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271064 HRP), 200 μg/ml, for WB, IHC/IP and ELISA; to either phycoerythrin (sc-271064 PE), fluorescein (sc-271064 FITC), Alexa Fluor® 488 (sc-271064 AF488), Alexa Fluor® 546 (sc-271064 AF546), Alexa Fluor® 594 (sc-271064 AF594) or Alexa Fluor® 647 (sc-271064 AF647), 200 μg/ml, for WB (RGB), IF, IHC/IP and FCM; and to either Alexa Fluor® 680 (sc-271064 AF680) or Alexa Fluor® 790 (sc-271064 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

LXRα/β (G-10) is recommended for detection of LXRα and LXRβ of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LXRα/β (G-10) is also recommended for detection of LXRα and LXRβ in additional species, including equine, canine, bovine and porcine.

LXRα/β (G-10) X TransCruz antibody is recommended for Gel Supershift and ChiP applications.

**Molecular Weight of LXRα: 50 kDa.**

**Molecular Weight of LXRβ: 56 kDa.**

Positive Controls: LXRβ (h2): 293T Lysate: sc-116107, mouse liver extract: sc-2256 or HeLa whole cell lysate: sc-2200.

**DATA**

LXRα/β (G-10) sc-271064. Western blot analysis of LXRα/β expression in non-transfected sc-117752 (A) and human LXRα/β transfected sc-116107 (B) 293T whole cell lysates.

LXRα/β (G-10) sc-271064. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human adrenal gland tissue showing nuclear and cytoplasmic staining of glandular cells.

**SELECT PRODUCT CITATIONS**


**STORAGE**

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

**RESEARCH USE**

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

**PROTOCOLS**

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