

Product Information Sheet

# Polyclonal Anti- LXRα

#### Immunogen

**Application** 

Purity

Catalogue No. PA1246

Immunogen affinity purified.

Lot No. 09G01

Ig type rabbit IgG

Size 100µg/vial

# **Specificity**

Rat. No cross reactivity with other proteins.

### **Recommended application**

Western blot

	Concen- tration	Tested Species	Concluded Species	Antigen Retrieval
WB	1µg/ml	Rat	Ms	-
IHC-P	-	-	-	-
IHC-F	-	-	-	-
ICC	-	-	-	-

A synthetic peptide corresponding to a sequence at the C-terminal of

human LXRa, identical to the related rat and mouse sequence.

Other applications have not been tested. Optimal dilutions should be determined by end user.

### Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

# Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

## To reorder contact us at: Antagene, Inc.

### Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

Toll Free: 1(866)964-2589 email: Info@antageneinc.com

#### BACKGROUND

LXRA is a tissue-specific cofactor that permits RXRA to function as a potent 9cRA receptor with a distinct target gene specificity.<sup>1</sup> It specifically interacts with RXRA in vivo to form a functional heterodimer in which RXRA is the ligand-binding subunit. Additionally, LXR activity is critical for physiologic lipid metabolism and transport.<sup>2</sup> LXRs are endogenous inhibitors of atherogenesis and are targets for therapeutic intervention in cardiovascular disease. Furthermore, LXRs and their ligands are negative regulators of macrophage inflammatory gene expression.<sup>3</sup> LXR is also found that as a transcriptional switch that integrates hepatic glucose metabolism and fatty acid synthesis.<sup>4</sup> The LXR-IDOL-LDLR axis defines a complementary pathway to sterol response element-binding proteins for sterol regulation of cholesterol uptake.<sup>5</sup>

#### REFERENCE

- 1. Willy, P. J.; Umesono, K.; Ong, E. S.; Evans, R. M.; Heyman, R. A.; Mangelsdorf, D. J. : LXR, a nuclear receptor that defines a distinct retinoid response pathway. *Genes Dev.* 9: 1033-1045, 1995.
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- 3. Joseph, S. B.; Castrillo, A.; Laffitte, B. A.; Mangelsdorf, D. J.; Tontonoz, P. : Reciprocal regulation of inflammation and lipid metabolism by liver X receptors. *Nature Med.* 9: 213-219, 2003.
- 4. Mitro, N.; Mak, P. A.; Vargas, L.; Godio, C.; Hampton, E.; Molteni, V.; Kreusch, A.; Saez, E. : The nuclear receptor LXR is a glucose sensor. *Nature* 445: 219-223, 2007.
- 5. Zelcer, N.; Hong, C.; Boyadjian, R.; Tontonoz, P. : LXR regulates cholesterol uptake through Idol-dependent ubiquitination of the LDL receptor. *Science* 325: 100-104, 2009.