Anti-LXR beta Antibody [PSH0-56] - BSA and Azide free

HA750633

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell
Molecular Wt:	Predicted band size: 51 kDa
Clone number:	PSH0-56

Description: Liver X receptor beta (LXR-β) is a member of the nuclear receptor family of transcription factors. LXR-β is encoded by the NR1H2 gene (nuclear receptor subfamily 1, group H, member 2). The liver X receptors (LXRs) were originally identified as orphan members of the nuclear receptor superfamily because their ligands were unknown. Like other receptors in the family, LXRs heterodimerize with retinoid X receptor and bind to specific response elements (LXREs) characterized by direct repeats separated by 4 nucleotides. Two genes, alpha (LXRA) and beta, are known to encode LXR proteins. Crystal structure of human liver X receptor β(LXRβ) forming heterodimer with its partner retinoid X receptor α(RXRα) on its cognate element, an AGGTCA direct repeat spaced by 4 nt shows an extended X-shaped arrangement, with DNA- and ligand-binding domains crossed. The LXRβ core binds DNA via canonical contacts and auxiliary DNA contacts that enhance affinity for the response element. Liver X receptor beta has been shown to interact with NCOA6[8] and Retinoid X receptor alpha.

Immunogen: Synthetic peptide within human LXR beta aa 50-100/460.

Positive control: SW480 cell lysate, HepG2 cell lysate, PC-3M cell lysate, A549 cell lysate, HeLa cell lysate, HT-29 cell lysate, HCT116 cell lysate, HEK-293 cell lysate, mouse brain tissue lysate, mouse liver tissue lysate, rat liver tissue lysate, C2C12, HCT116.

Subcellular location: Nucleus.

Database links: SwissProt: P55055 Human | Q60644 Mouse | Q62755 Rat

Recommended Dilutions:

WB	1:1,000
IF-Cell	1:100

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

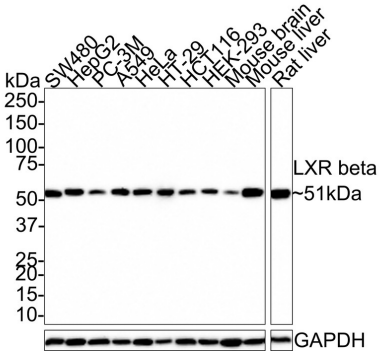

Fig1: Western blot analysis of LXR beta on different lysates with Rabbit anti-LXR beta antibody (HA750633) at 1/1,000 dilution.

Lane 1: SW480 cell lysate (20 µg/Lane)
Lane 2: HepG2 cell lysate (20 µg/Lane)
Lane 3: PC-3M cell lysate (20 µg/Lane)
Lane 4: A549 cell lysate (20 µg/Lane)
Lane 5: HeLa cell lysate (20 µg/Lane)
Lane 6: HT-29 cell lysate (20 µg/Lane)
Lane 7: HCT116 cell lysate (20 µg/Lane)
Lane 8: HEK-293 cell lysate (20 µg/Lane)
Lane 9: Mouse brain tissue lysate (40 µg/Lane)
Lane 10: Mouse liver tissue lysate (40 µg/Lane)
Lane 11: Rat liver tissue lysate (40 µg/Lane)

Predicted band size: 51 kDa
Observed band size: 51 kDa

Exposure time: 2 minutes;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA750633) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

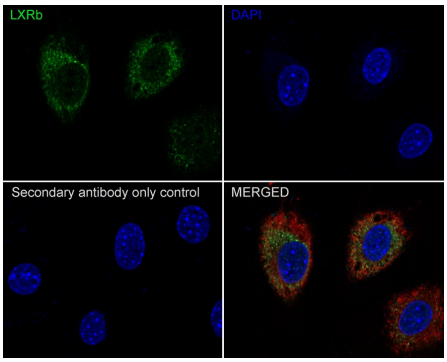

Fig2: Immunocytochemistry analysis of C2C12 cells labeling LXR beta with Rabbit anti-LXR beta antibody (HA750633) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 ℃, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-LXR beta antibody (HA750633) at 1/100 dilution in 2% negative goat serum overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/200 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

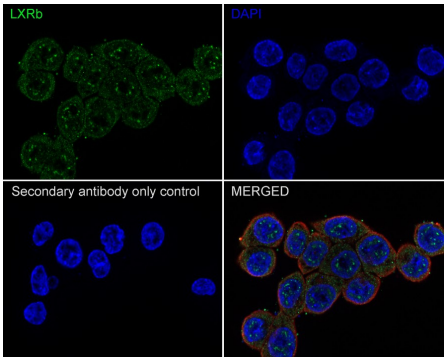

Fig3: Immunocytochemistry analysis of HCT116 cells labeling LXR beta with Rabbit anti-LXR beta antibody (HA750633) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 ℃, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-LXR beta antibody (HA750633) at 1/100 dilution in 2% negative goat serum overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/200 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

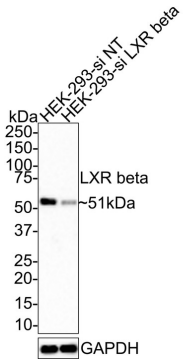

Fig4: Western blot analysis of LXR beta on different lysates with Rabbit anti-LXR beta antibody (HA750633) at 1/1,000 dilution.

Lane 1: HEK-293-si NT cell lysate
Lane 2: HEK-293-si LXR beta cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 51 kDa
Observed band size: 51 kDa

Exposure time: 2 minutes;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA750633) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

Background References

1. Zhang W et al. The LXRB-SREBP1 network regulates lipogenic homeostasis by controlling the synthesis of polyunsaturated fatty acids in goat mammary epithelial cells. J Anim Sci Biotechnol. 2022 Nov
2. Wolski H et al. Expression of ABCA1 Transporter and LXRA/LXRB Receptors in Placenta of Women with Late Onset Preeclampsia. J Clin Med. 2022 Aug