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LEPR / Leptin Receptor Antibody (Internal)

Goat Polyclonal Antibody

Catalog # ALS12613

Specification

LEPR / Leptin Receptor Antibody (Internal) - Product Information

Application	**WB, IHC-P, E**
Primary Accession	P48357
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**132kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **E~~N/A**

LEPR / Leptin Receptor Antibody (Internal) - Additional Information

Gene ID 3953

Other Names
Leptin receptor, LEP-R, HuB219, OB receptor, OB-R, CD295, LEPR, DB, OBR

Target/Specificity
Human LEPR / Leptin Receptor. This antibody is expected to recognise all three reported isoforms (NP_002294.2; NP_001003679.1; NP_001003680.1).

Reconstitution & Storage
Store at -20°C. Minimize freezing and thawing.

Precautions
LEPR / Leptin Receptor Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

LEPR / Leptin Receptor Antibody (Internal) - Protein Information

Name LEPR

Synonyms DB, OBR

Function
Receptor for hormone LEP/leptin (Probable) (PubMed:22405007). On ligand binding, mediates LEP central and peripheral effects through the activation of different signaling pathways such as JAK2/STAT3 and MAPK cascade/FOS. In the hypothalamus, LEP acts as an appetite- regulating factor that induces a decrease in food intake and an increase in energy consumption by inducing anorexinogenic factors and suppressing orexigenic neuropeptides, also regulates bone mass and secretion of hypothalamo-pituitary-adrenal hormones (By similarity)

(PubMed:9537324). In the periphery, increases basal metabolism, influences reproductive function, regulates pancreatic beta-cell function and insulin secretion, is pro-angiogenic and affects innate and adaptive immunity (PubMed:12504075, PubMed:25060689, PubMed:8805376). Control of energy homeostasis and melanocortin production (stimulation of POMC and full repression of AgRP transcription) is mediated by STAT3 signaling, whereas distinct signals regulate NPY and the control of fertility, growth and glucose homeostasis. Involved in the regulation of counter-regulatory response to hypoglycemia by inhibiting neurons of the parabrachial nucleus. Has a specific effect on T lymphocyte responses, differentially regulating the proliferation of naive and memory T -ells. Leptin increases Th1 and suppresses Th2 cytokine production (By similarity).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Basolateral cell membrane

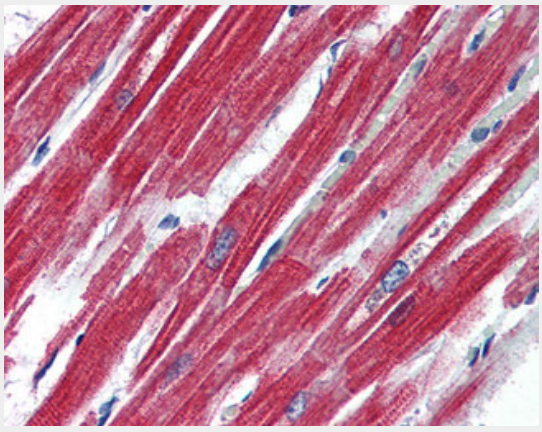
Tissue Location
Isoform A is expressed in fetal liver and in hematopoietic tissues and choroid plexus. In adults highest expression in heart, liver, small intestine, prostate and ovary. Low level in lung and kidney. Isoform B is highly expressed in hypothalamus, but also in skeletal muscle. Detected in fundic and antral epithelial cells of the gastric mucosa (PubMed:19159218). Isoform B and isoform A are expressed by NK cells (at protein level) (PubMed:12504075)

LEPR / Leptin Receptor Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LEPR / Leptin Receptor Antibody (Internal) - Images



Anti-Leptin Receptor antibody IHC of human heart.

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LEPR / Leptin Receptor Antibody (Internal) - Background

Receptor for obesity factor (leptin). On ligand binding, mediates signaling through JAK2/STAT3. Involved in the regulation of fat metabolism and, in a hematopoietic pathway, required for normal lymphopoiesis. May play a role in reproduction. Can also mediate the ERK/FOS signaling pathway (By similarity).

LEPR / Leptin Receptor Antibody (Internal) - References

Tartaglia L.A.,et al.Cell 83:1263-1271(1995).
Bennett B.D.,et al.Curr. Biol. 6:1170-1180(1996).
Cioffi J.A.,et al.Nat. Med. 2:585-589(1996).
Thompson D.B.,et al.Hum. Mol. Genet. 6:675-679(1997).
Luoh S.-M.,et al.J. Mol. Endocrinol. 18:77-85(1997).