Datasheet for ABIN7582050

anti-Leptin Receptor antibody (Extracellular) (FITC)

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Overview

Quantity:	50 µL
Target:	Leptin Receptor (LEPR)
Binding Specificity:	AA 777-791, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Leptin Receptor antibody is conjugated to FITC
Application:	Flow Cytometry (FACS), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal antibody to Leptin Receptor (extracellular) conjugated to the fluorescent dye FITC.
Immunogen:	(C)EDDGMKWLRIPSNVK, corresponding to amino acid residues 777 - 791 of mouse LEPR
Sequence:	(C)EDDGMKWLRI PSNVK
Isotype:	IgG
Specificity:	Extracellular, N-terminus.
Predicted Reactivity:	Rat - 13 out of 15 amino acid residues identical Won't recognize Leptin Receptor from human samples
Characteristics:	Anti-Leptin Receptor (extracellular) Antibody (ABIN7581913) is a highly specific antibody directed against an extracellular epitope of the mouse protein. The antibody can be used in

Product Details

	western blot, immunohistochemistry and flow cytometry applications. It has been designed to recognize Leptin Receptor from mouse and rat samples. The antibody will not work with human samples. Anti-Leptin Receptor (extracellular)-FITC Antibody (ABIN7581913)-F) is directly conjugated to fluorescein isothiocyanate (FITC) fluorophore. This conjugated antibody has been developed to be used in immunofluorescent applications such as direct flow cytometry and live cell imaging.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	Leptin Receptor (LEPR)
Alternative Name:	LEPR (LEPR Products)
Background:	LEPR, OB receptor, OBR, CD295,Leptin receptor (LEP-R), also known as OB receptor (OB-R), HuB219, and CD295 is a receptor for the hormone leptin, which is involved in energy homeostasis and hunger/satiation cues.1LEP-R, encoded by the LEPR gene, is composed of 1165 amino acids with the extracellular domain consisting an N-terminal cytokine receptor homology domain (CRH-1), an immunoglobulin-like (Ig) domain, a second CRH domain (CRH-2) which is also known as the leptin-binding domain (LBD) and two Fibronectin type III (FNIII) domains. LEP-R forms a high-affinity 1:1 ratio complex with leptin in solution, but does not form the 2:1 ratio complex associated with the small cytokine receptors, such as growth hormone receptor (GHR). The 1:1 ratio interaction occurs at leptin's binding site II and can be blocked by mutations in this region. Mutations within the Ig domain of LEP-R and binding site III of leptin have been shown to inhibit transduction without disrupting receptor binding, indicating that the leptin-signaling complex forms a crossover arrangement between two leptin-LEP-R complexes.1Leptin is produced in adipose tissue in proportion to triglyceride stores and serves as an indicator of long-term energy status. Leptin acts mainly in the brain, specifically the hypothalamus, where its action is integrated with that of other adipokines, gastrokines, and other signals to coordinate energy homeostasis. Once secreted into the circulation, leptin travels to the brain where it enters the CNS likely via the choroid plexus and circumventricular organs. In the brain, leptin acts by binding and activating LEP-R, which is primarily expressed on specialized subsets of neurons in certain hypothalamic and brainstem nuclei.2Lack of leptin, such as in cases of starvation or genetic leptin deficiency, increases hunger while promoting an energy-sparing cascade of neuroendocrine and autonomic changes, including decreased sympathetic nervous system tone, thyroid function, growth, reproduction, and a variety of behavioral and physiological changes to respond appropriately to low stores of energy.2

Target Details

Gene ID:	16847
UniProt:	P48356
Pathways:	JAK-STAT Signaling, AMPK Signaling, Feeding Behaviour

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody
Comment:	Negative Control: (ABIN7582044) Blocking Peptide:
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	15 µL or 50 µL double distilled water (DDW), depending on the sample size.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 1 % BSA with 0.05 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C, protected from the light, for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).