Active Recombinant Mouse LEP protein, His-tagged

Cat. No. LEP-3284M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Mouse LEP protein(P41160)(22~167 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Mouse
Source	E.coli
ProteinLength	22-167 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	Leptin is a hormone made by adipose cells that helps to regulate energy balance by inhibiting hunger. Many of leptin's effects are mediated through neuropeptide-containing neurons and neuropeptide receptors in the hypothalamus. Although regulation of fat stores is deemed to be the primary function of leptin, it also plays a role in other physiological processes, as evidenced by its multiple sites of synthesis other than fat cells, and the multiple cell types beside hypothalamic cells that have leptin receptors. A functional binding ELISA assay was conducted to detect the interaction of recombinant mouse LEP and recombinant human LEPR. Briefly, LEP were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to LEPR-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-LEP pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary

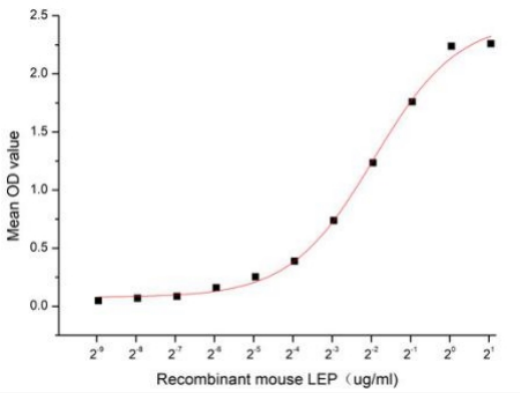
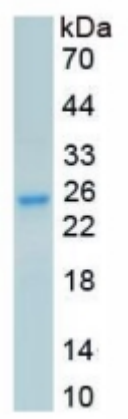
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	antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µ stop solution to the wells and read at 450 nm immediately. The binding activity of of LEP and LEPR was shown, the EC50 for this effect is 0.26 ug/mL.
Molecular Mass	21.7kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 90% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	Lep leptin [Mus musculus]
Official Symbol	LEP
Synonyms	LEP; leptin; obesity factor; ob; obese;
Gene ID	16846
mRNA Refseq	NM_008493
Protein Refseq	NP_032519

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Activity	
SDS-PAGE	

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