

Leptin (LEP) Active Protein | LEP active protein

Active Leptin (LEP)

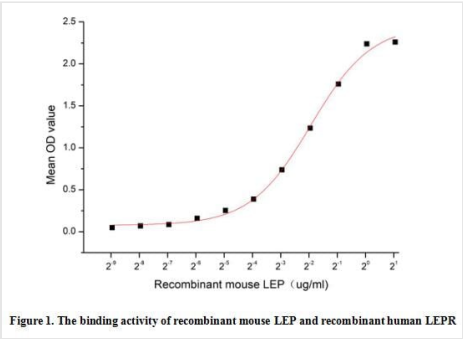
CATALOG # AAA161681	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Leptin (LEP); Active Leptin (LEP); Leptin; OB; OBS; Obesity Homolog; Obesity Factor; Obese Protein4; LEP active protein

PRODUCT SPECIFICATIONS

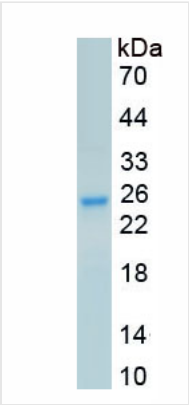
Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Val22~Cys1 67
Applicable Applications for LEP active protein	Activity Assay, Cell Culture
Species	Mouse
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	8.4
Research Area	Metabolic pathway, Endocrinology, Cardiovascular biology
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



Bioactivity

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 degree 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 antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450 nm immediately. The binding activity of of LEP and LEPR was shown in Figure 1, the EC50 for this effect is 0.26 ug/mL.

SDS-PAGE
Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for LEP active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	6678678
NCBI GeneID	16846
NCBI Accession #	NP_032519.1
NCBI GenBank Nucleotide #	NM_008493.3
UniProt Accession #	P41160
Molecular Weight	18,709 Da
NCBI Official Full Name	leptin
NCBI Official Synonym Full Names	leptin
NCBI Official Symbol	Lep
NCBI Official Synonym Symbols	ob; obese
NCBI Protein Information	leptin; obesity factor
UniProt Protein Name	Leptin
UniProt Gene Name	Lep
UniProt Synonym Gene Names	Ob
UniProt Entry Name	LEP_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/leptin-lep/161681>