

Leptin (LEP) Active Protein | LEP active protein

Active Leptin (LEP)

CATALOG # AAA148160	HOST E Coli	REACTIVITY Human	APPLICATIONS Activity Assay, Cell Culture
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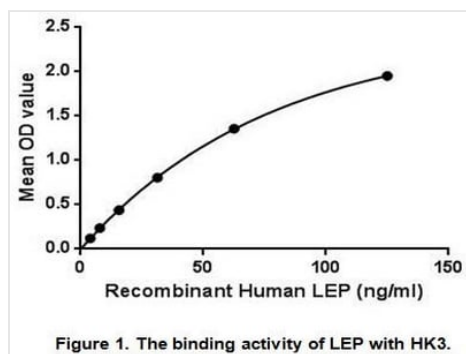
PRODUCT SYNONYMS

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

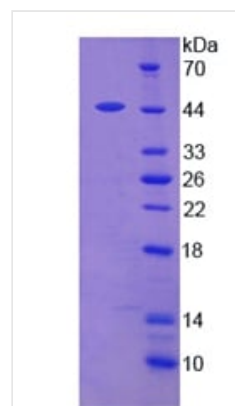
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Human
Purity/Purification	> 90%
Form/Format	Freeze-dried powder
Sequence Length	167
Applicable Applications for LEP active protein	Activity Assay, Cell Culture
Tag	N-terminal His and GST Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Val22~Cys167
Isoelectric Point	5.7

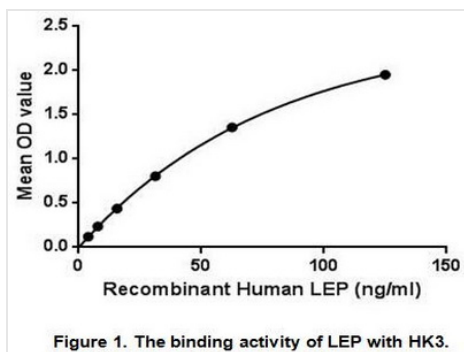
IMAGES



Application Data



SDS-PAGE



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. Besides, Hexokinase 3, White Cell (HK3) has been identified as an interactor of LEP, thus a binding ELISA assay was conducted to detect the interaction of recombinant human LEP and recombinant human HK3. Briefly, LEP were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to HK3-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-LEPpAb, 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 50uL stop solution to the wells and read at 450nm immediately. The binding activity of LEP and HK3 was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for LEP active protein	Metabolic pathway; Endocrinology; Cardiovascular biology
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4557715
NCBI GeneID	3952
NCBI Accession #	NP_000221.1
NCBI GenBank Nucleotide #	NM_000230.2
UniProt Accession #	P41159; O15158; Q56A88
Molecular Weight	Predicted Molecular Weight: 46.0kDa Accurate Molecular Weight: 46kDa
NCBI Official Full Name	leptin
NCBI Official Synonym Full Names	leptin
NCBI Official Symbol	LEP
NCBI Official Synonym Symbols	OB; OBS; LEPD
NCBI Protein Information	leptin
UniProt Protein Name	Leptin
UniProt Gene Name	LEP

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.

