

Product datasheet for **AP05456PU-N**

Leptin (LEP) Sheep Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA
Recommended Dilution:	ELISA: 1/10,000 - 1/50,000.
Reactivity:	Human, Mouse, Rat
Host:	Sheep
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	HMW conjugated leptin amino acids 57-70.
Specificity:	This antibody recognises leptin.
Formulation:	Phosphate buffered saline pH7.4 containing 0.09% Sodium Azide (NaN ₃) State: Purified State: Liquid purified IgG
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. 18 months from date of despatch.
Gene Name:	leptin
Database Link:	Entrez Gene 3952 Human P41159



[View online »](#)

Background:

Leptin is a 16kDa secreted protein hormone encoded by the OB gene, which plays a key role in the regulation of metabolism, body weight and reproduction and is expressed primarily by white adipocytes, and to a lesser extent by stomach endothelium and the placenta.

Regulation of food intake and energy expenditure by leptin is thought to predominantly occur in the hypothalamus of the brain, where leptin binds with high affinity to neuronal leptin receptors (OB-R), inhibiting the action of the feeding stimulants neuropeptide Y (NPY) and agouti-related peptide (AgRP), or promoting the effects of the appetite regulator alpha-melanocyte-stimulating hormone (alpha-MSH). Leptin also acts as a direct stimulator of fatty acid oxidation in the mitochondria of liver and skeletal muscle cells, and influences glucose and fat metabolism.

The expression of leptin in relation to metabolic status is influenced by hormonal and metabolite control: stimulators of leptin include insulin and cortisol, whilst cAMP, thiazolidinediones and beta-adrenergic receptor agonists, reduce leptin expression.

Synonyms:

LEP, OB, OBS, Obesity factor, Obese protein