

Datasheet: 5633-1009G

SHEEP ANTI LEPTIN
LEPTIN
Purified
Polyclonal Antibody
Polyclonal IgG
1 ml

Product Details

Applications	This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <u>www.bio-rad-antibodies.com/protocols</u> .								
		Yes	No	Not Determined	Suggested Dilution				
	ELISA	•			1/10,000 - 1/50,000				
	Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.								
Species Cross Reactivity	Reacts with: Human, Mouse, Rat N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.								
Product Form	Purified IgG - liquid								
Antiserum Preparation Antisera to leptin were raised by repeated immunisations of sheep with highly purified antigen. Purified IgG prepared by affinity chromatography on Protein G.									
Buffer Solution	Phosphate buffered saline								
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)								
Approx. Protein Concentrations	IgG concentration 5.0mg	/ml							
Immunogen	HMW conjugate coupled to leptin peptide amino acids 57-70.								

External Database Links	UniProt: <u>P41159</u> <u>Related reagents</u> Entrez Gene: <u>3952</u> LEP <u>Related reagents</u>				
Synonyms	OB, OBS				
RRID	AB_1055768				
Specificity	Sheep anti Human Leptin antibody recognises leptin, a ~16 kDa secreted protein hormone encoded by the OB gene, which plays a key role in the regulation of metabolis 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 α -melanocyte-stimulating hormone (α -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.				
Further Reading	 Mantzoros, C.S. (1999) The role of leptin in human obesity and disease: a review of current evidence. <u>Ann Intern Med. 130 (8): 671-80.</u> Houseknecht, K.L. <i>et al.</i> (1998) The biology of leptin: a review. <u>J Anim Sci. 76 (5): 1405-20.</u> 				
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.				
Guarantee	12 months from date of despatch				
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</u>				
Regulatory	For research purposes only				

Related Products

Recommended Secondary Antibodies

Donkey Anti Sheep IgG (STAR88...) DyLight®488, HRP

Rabbit Anti Sheep IgG (H/L) (5184-2304...) Biotin

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M381923:210512'

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