ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Human Obestatin Antibodies

Cat # OBSN11-P	Human Obestatin Control/Blocking Peptide	**SIZE**: 100 µg
Cat # OBSN11-S	Rabbit anti-human Obestatin antiserum	**SIZE**: 100 µl
Cat # OBSN11-A	Rabbit anti-human Obestatin IgG (affinity pure)	**SIZE**: 100 µg

Control of appetite involves a number of gastrointestinal hormones that belong to the ghrelin-motilin ligand family that either stimulate food intake and gastric emptying or inhibit these responses.

Recently, a new member of the ghrelin-motilin family was identified by using bioinformatic predictions about enzyme cleavage of the prepropeptide of ghrelin. The newly identified 23 amino acid, ghrelin-associated peptide was named obestatin (1). Although both peptides originate from the same precursor prepropeptide, they have opposing physiological roles. Obestatin exerts anorexigenic effects by decreasing food intake, gastric emptying, jejunal motility, and weight gain by binding to GPR39 orphan receptor, while ghrelin exerts opposing orexigenic effects by binding to growth hormone secretagogue receptor.
Reports that GPR39 is a cognate receptor for Obestatin were recently contradicted (3, 4) warning for more prudent approach to investigation.

Obestatin rat: 23aa; mouse: 23aa; human: 23aa – 2.5KDa; Chromosome: 3p26-p25. Highly expressed in stomach and found in serum as well.

Source of Antigen, Antibodies

Antigen	13 - aa peptide of Human OBSN11 (Protein accession # Q9UBU3; ref. 1); designated as OBSN11-P control/blocking peptide conjugated to KLH; epitope location ~ ~N-terminus
Antibody host/type	Rabbit, Polyclonal IgG (Cat # OBSN11-A), purified over antigen-Agarose
Secondary Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
Negative Control Ab	Non-immune rabbit IgG (Cat # 20009-1) to be used as –ve control for ELISA, WB, IHC etc.

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified)
100ul solution lyophilized powder
Supplied in Buffer: 0.05% azide
Reconstitute powder in 100 ul PBS

Affinity pure IgG
100 ug/100ul solution lyophilized powder
Supplied in **Buffer**: PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide
100 ug/100 ul solution lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder

Recommended Usage

Western Blotting: 1-10 µg/ml; using affinity pure antibody (chemiluminescence technique).

ELISA: 1:100K; using 50-100 ng control peptide/well.

Histochemistry & Immunofluorescence: Not tested; we recommend the use of affinity purified antibody at 2-10 µg/ml.

Specificity & Cross-reactivity

Human OBSN11-P control peptide sequence is 100% conserved in mouse, rat, pig, sheep, monkey, dog and cat. Antibody cross-reactivity in various species is not known. The control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at the web site).

General References: 1) J.V. Zhang, et al., (2005) Science, 310, 996.; M. Kojima, et al., (1999) Nature, 402, 656.; J.V. Zhang, et al., (2007) Science, 315, 766.; N. Chartrel, et al., (2007) Science, 315, 766.

*This product is for in vitro research use only.

Related material available from ADI

Antibodies to obestatin, Grehlin, GHSR and GPR39
Peptides and KLH/BSA conjugates to human, mouse and rat S3-N-Octonylated Ghrelin
Peptides to full length and des 1-10 obestatin (h,m,r)
OBSN11-A-P 80529A

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