

Product Specification Sheet

**Mouse Obestatin Antibodies**

<b>Cat # OBSN12-P</b>	Mouse Obestatin Control/Blocking Peptide	<b>SIZE:</b> 100 µg
<b>Cat # OBSN12-S</b>	Rabbit anti-mouse Obestatin antiserum	<b>SIZE:</b> 100 µl
<b>Cat # OBSN12-A</b>	Rabbit anti-mouse Obestatin IgG (affinity pure)	<b>SIZE:</b> 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** (2) exerts opposing orexigenic effects by binding to growth hormone secretagogue receptor.

**Obestatin:** Human, mouse, rat 23aa each – 2.6kDa; mouse Chromosome: 6E3. Mainly expressed in the gastrointestinal tract with higher levels in the stomach, medium levels in the duodenum, jejunum, ileum and colon. Low expression in the testis and brain. Not detected in the salivary gland, pancreas, liver and lung.

**Source of Antigen, Antibodies**

<b>Antigen</b>	23 - aa peptide of Mouse Obestatin (Protein accession # <b>Q9EQX0</b> ; ref. 1); designated as OBSN12-P control/blocking peptide conjugated to KLH; epitope location ~ Full Length OBSN
<b>Antibody host/type</b>	Rabbit, Polyclonal antiserum (#OBSN12-S) and IgG (Cat # OBSN12-A), purified over antigen-Agarose
<b>Secondary Ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
<b>Negative Control Ab</b>	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**

Mouse OBSN12-P control peptide sequence is 100% conserved in rat and 87% in human obestatin protein. We recommend using antibody Cat # OBSN13-A against human obestatin protein. 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.

**General References:** Tomasett C, et al., (2000) Gastroenterology 119:395-405

\*This product is for in vitro research use only.

**Related material available from ADI**

- Antibodies to human, mouse and rat obestatin and Ghrelin

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