ANTIBODYSHOP®

PRODUCT SPECIFICATION
04/01/2012

Anti-Ghrelin (human)
Mouse monoclonal antibody

PRODUCT NO.

ABS 050-45

Subclass: IgG1/l

Clone: 45

PRESENTATION

Preparation: Protein-A purified
Content: Available in 200 µL and 1 mL size.1 mg/mL +/- 15%. See Certificate of Analysis for details.
Solvent: 0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide
Storage: 4-8ºC without exposure to light. No precautions necessary during handling.

ANTIGEN

Ghrelin is an orexigenic (food intake stimulating) 27 or 28 amino-acid gut-brain peptide hormone produced by endocrine cells in the stomach, pancreatic islets and certain hypothalamic neurons[1,2]. Two forms are produced by alternative mRNA splicing; Gln13 or 14 is missing from the second form. "Active" ghrelin is acylated (octanoylated) at Ser3; this form stimulates growth hormone secretion via GHS receptors and increases appetite. The des-acyl form does not have these effects but may have other actions. Plasma responses of total ghrelin to food may reflect those of active ghrelin[3].

IMMUNOGEN

Synthetic human Ser3-octanoyl ghrelin-28

SPECIFICITY

ABS 050-45 binds human ghrelin and human des-acyl ghrelin, cross-reacting ~5% with rat ghrelin in sandwich ELISA with ABS 052-121 as biotinylated detection antibody.

EPITOPE SPECIFICITY

Not determined. Probably includes residues 11 or 12 to account for the lower cross-reactivity with rat ghrelin.

REACTIVITY

ABS 050-45 binds human ghrelin in solution.

ABS 050-45 (as capture antibody) forms a pair with ABS 052-121 as biotinylated detection antibody for measuring total human ghrelin by sandwich ELISA.

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

SP2mIL6

IMMUNIZATION

Female NMRIxBALB/c mice immunized intraperitoneally with immunogen adsorbed onto aluminum hydroxide gel and emulsified in Freund's incomplete adjuvant.

APPLICATION

Method	Usability	References
ELISA	Yes	
Immunoblotting	Not determined	
Immunohistochemistry	Not determined	

REFERENCES

1. Kojima M, Hosoda H, Matsuo H, Kangawa K (2001) Ghrelin: discovery of the natural endogenous ligand for the growth hormone secretagogue receptor. Trends Endocrinol Metab 12:118-122.
2. Kojima M, Kangawa K (2005) Ghrelin: structure and function. Physiol Rev 85:495-522.
3. Foster-Schubert KE, Overduin J, Prudom CE, Liu J, Callahan HS, Gaylinn BD, Thorner MO, Cummings DE (2008) Acyl and total ghrelin are suppressed strongly by ingested proteins, weakly by lipids, and biphasically by carbohydrates. J Clin Endocrinol Metab 93:1971-1979.

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