

**Anti-Exendin-4  
Mouse monoclonal antibody**

Subclass: IgG1/k

PRODUCT NO.

**ABS 012-23**

Clone: 23

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: 4-8°C without exposure to light. No precautions necessary during handling.

ANTIGEN

Exendin-4 is a 39 amino acid peptide found in venom from the Gila monster *Heloderma suspectum* (1). It is a member of the glucagon-secretin family of peptide hormones and neuropeptides. Exendin-4 is a potent agonist of the GLP-1 receptor and hence a potent stimulator of insulin secretion (2).

IMMUNOGEN

Synthetic exendin-4 adsorbed onto aluminum hydroxide gel

SPECIFICITY

Specific for exendin-4. No cross-reactivity with GLP-1, GLP-2 (human) or glucagon coated on ELISA wells.

EPI TOPE SPECIFICITY

The epitope is in the 9-39 region of the peptide, and the antibody cross-reacts strongly with exendin (9-39)amide.

REACTIVITY

ABS 012-23 binds to exendin-4 when coated on ELISA wells and reacts specifically with exendin-4 in solution giving a  $K_a$  of  $7.0 \times 10^8$  in an inhibition ELISA. The binding between ABS 012-23 and exendin-4 is disrupted by 0.1 M glycine pH 3.

ABS 012-23 (as biotinylated detection antibody) forms a sandwich ELISA pair with ABS 033-10 (as capture antibody) for measuring exendin-4, giving a detection limit of as little as 40 pmol/L in an unoptimized buffer assay.

CULTURE MEDIUM

RPMI 1640 with 2-10% fetal calf serum

FUSION PARTNER

SP2mIL6

IMMUNIZATION

NMRI x BALB/c mice immunized by intraperitoneal injection

APPLICATION

Method	Usability	References
ELISA	Yes	
Immunoblotting	Not determined	
Immunohistochemistry	Not determined	

REFERENCES

- Eng J, Kleinman WA, Singh L, Singh G, Raufman JP (1992) Isolation and characterization of exendin-4, an exendin-3 analogue, from *Heloderma suspectum* venom. Further evidence for an exendin receptor on dispersed acini from guinea pig pancreas. *J Biol Chem* 267:7402-7405.
- Goke R, Fehmann HC, Linn T, Schmidt H, Krause M, Eng J, Goke B (1993) Exendin-4 is a high potency agonist and truncated exendin-(9-39)-amide an antagonist at the glucagon-like peptide 1-(7-36)-amide receptor of insulin-secreting beta-cells. *J Biol Chem* 268:19650-19655.

**CONDITIONS**

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