ANTIBODYSHOP®

04/01/2012

PRODUCT SPECIFICATION

Anti-Glucagon-like peptide-1 (GLP-1, Mid-molecule specific)

Mouse monoclonal antibody, biotinylated

Subclass: IgG1/k

PRODUCT NO. **HYB 147-12 B**

PRESENTATION

Preparation: Biotinylated
Content: 50 µL, 1 mg/mL +/- 15%. See Certificate of Analysis for details.
Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.14 M NaCl and 15 mM sodium azide
Storage: 4-8ºC without exposure to light. No precautions necessary during handling.

ANTIGEN

Glucagon-like peptide-1(7-36)amide (GLP-1(7-36)amide) is the principal active form of GLP-1, the other being GLP-1(7-37). GLP-1 is a peptide hormone of the glucagon family, produced by the L cells of the intestinal mucosa from the same prohormone as glucagon. The active forms are potent stimulators of glucose-dependent insulin secretion. The sequence of GLP-1 is fully conserved in all mammalian species examined so far.

IMMUNOGEN

Synthetic GLP-1(7-36)amide coupled to carrier and adsorbed onto aluminum hydroxide gel

SPECIFICITY

Reacts with all forms of GLP-1, including precursor and GLP-1(9-37) /GLP-1(9-36amide) metabolite

EPITOPE SPECIFICITY

Mid-molecular epitope of GLP-1

REACTIVITY

HYB 147-12 binds to GLP-1 when coated directly onto the microtiter well, and binds GLP-1(7-36)amide in solution giving a Ka of 4.0x10E8 in inhibition ELISA. HYB 147-12 cross-reacts <0.4% with coated glucagon. In inhibition ELISA no binding of free glucagon in solution is detected, giving an estimated cross-reactivity of <0.2%. Although not tested, HYB 147-12 is likely to detect all known molecular forms of GLP-1 in immunohistochemistry.
Biotinylated HYB 147-12 is the preferred detection antibody for measuring C-terminally amidated forms of GLP-1 in combination with HYB 147-06 as capture antibody. HYB 147-12 can be used as a capture antibody in combination with ABS 046-03B as a detection antibody for measuring non-amidated GLP-1 forms and cross- reacting about 16% with C-terminally amidated GLP-1. Results show detection limits of 44pmol/L which is 10-20 times higher than the basal concentration of GLP-1, so the assays have to be optimized.
In Western blotting a dilution guideline of 1/2000 has proved successful.

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

X63-Ag8.653

IMMUNIZATION

Female BALB/c mice by intraperitoneal injections

APPLICATION

Method	Usability	References
ELISA	Yes	
Immunoblotting	Not determined	
Immunohistochemistry	Not determined	

REFERENCES

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