



## **Monoclonal antibody against human Glucagon-like peptide-1 (GLP-1)**

**Product No. BP147-12**

**american diagnostica gmbh**

Kaplaneigasse 35 • D-64319 Pfungstadt  
Tel: +49 6167 990899 • Fax: +49 6167 990808

### **Description**

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 pro-hormone 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.

### **Preparation**

No. BP147-12 is a mouse IgG1/k monoclonal antibody purified from cell culture supernatant by Protein A/G affinity chromatography. Synthetic GLP-1 (7-36) amide coupled to carrier and adsorbed onto aluminum hydroxide gel was used as the immunizing antigen.

### **Specificity**

Reacts with all forms of GLP-1, including precursor.

### **Epitope Specificity**

Mid-molecular epitope of GLP-1. Differs from that of BP147-06 (C-terminal amide).

### **Reactivity**

BP147-12 binds to GLP-1 when coated directly onto the microtiter well, and binds GLP-1(7-36)amide in solution giving a  $K_a$  of  $4.0 \times 10^8$  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, BP147-12 is likely to detect all known molecular forms of GLP-1 in immunohistochemistry. Biotinylated BP147-12 is the preferred detection antibody for measuring C-terminally amidated forms of GLP-1 in combination with BP147-06 as capture antibody.

### **Presentation**

Screw capped vial containing 100  $\mu$ g of purified IgG. Concentration 1 mg/ml 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15 mM sodium azide.

### **Storage and Stability**

Store the antibody at 2°-8°C. The antibody may be aliquoted and stored frozen at -20°C or colder. It is recommended to avoid freeze-thaw cycles.

### **Applications**

ELISA (The dilution guideline for ELISA is based on use as detection antibody for antigen coated at 0.2  $\mu$ g/mL. Users should determine the optimal dilutions for their own purposes)

Western blot