**BACKGROUND**

Glucagon, a pancreatic hormone, functions as an antagonist to Insulin, stimulating the conversion of glycogen to glucose and increasing blood sugar levels. GLP-1 functions as a transmitter in the central nervous system, inhibiting feeding and drinking behavior. Both Glucagon and GLP-1 function through their specific binding to the Glucagon receptor or GLP-1R, respectively. The Glucagon receptor shows expression in liver, kidney and adipose tissue. GLP-1R expression primarily localizes to areas of the hypothalamus involved in feeding behavior. Both receptors and their ligands serve as potential targets for the therapeutic treatment of diabetes.

**CHROMOSOMAL LOCATION**

Genetic locus: GLPR1 (human) mapping to 6p21.2; Gip1r (mouse) mapping to 17 A3.3.

**SOURCE**

GLP-1R (D-6) is a mouse monoclonal antibody raised against amino acids 91-145 mapping within an N-terminal extracellular domain of GLP-1R of human origin.

**PRODUCT**

Each vial contains 200 µg IgG₉ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GLP-1R (D-6) is available conjugated to agarose (sc-390774 AC), 500 µg/sample, for IP; to HRP (sc-39074 HRP), 200 µg/ml, for Immunoblotting; to Alexa Fluor® 488 (sc-390774 AF488), Alexa Fluor® 564 (sc-39074 AF546), Alexa Fluor® 594 (sc-39074 AF594) or Alexa Fluor® 647 (sc-39074 AF647), 200 µg/ml, for WB (RGB), IF, IF-HCIP and FCM; and to either Alexa Fluor® 680 (sc-390774 AF680) or Alexa Fluor® 700 (sc-39074 AF700), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

GLP-1R (D-6) is recommended for detection of GLP-1R of mouse, rat and human origin by Western Blotting (starting dilution: 1:100, dilution range: 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution: 1:50, dilution range: 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range: 1:30-1:3000).

Suitable for use as control antibody for GLP-1R siRNA (h): sc-45760, GLP-1R siRNA (m): sc-45764, GLP-1R siRNA (r): sc-270026, GLP-1R shRNA Plasmid (h): sc-45760-SH, GLP-1R shRNA Plasmid (m): sc-45764-SH, GLP-1R shRNA Plasmid (r): sc-270026-SH, GLP-1R shRNA (h) Lentiviral Particles: sc-45760-V, GLP-1R shRNA (m) Lentiviral Particles: sc-45764-V and GLP-1R shRNA (r) Lentiviral Particles: sc-270026-V.

Molecular Weight of GLP-1R: 56 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, SK-N-SH cell lysate: sc-2410 or human liver extract: sc-363766.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG HRP: sc-516102 or m-IgG HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG HRP-FITC: sc-516140 or m-IgG Bp-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

![Western blot analysis of GLP-1R expression in NIH 3T3 cells](image)

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.