**AdipoR1 (C-14): sc-46748**

**BACKGROUND**

Adiponectin is a circulating hormone secreted by adipocytes that improves the metabolism of glucose and lipids, and is expressed at low levels in those with obesity and diabetes. Adiponectin receptors AdipoR1 and AdipoR2, also designated progestin and AdipoQ receptor family members I and II, respectively, regulate fatty acid oxidation and the uptake of glucose by adiponectin. Each receptor activates a unique set of signaling molecules including AMPK, p38 MAPK and PPARα. AdipoR1 has a high affinity for globular adiponectin and low-affinity for full-length adiponectin, while AdipoR2 has an intermediate affinity for both forms. AdipoR1 and AdipoR2 are mainly expressed in liver and muscle. Adiponectin, AdipoR1 and AdipoR2 are all associated with body composition, Insulin sensitivity and metabolic parameters. Physical training increases circulating adiponectin and mRNA expression of AdipoR1 and AdipoR2 in muscle, which may mediate the improvement of insulin resistance and the metabolic syndrome in response to exercise.

**CHROMOSOMAL LOCATION**

Genetic locus: ADIPOR1 (human) mapping to 1q32.1; Adipor1 (mouse) mapping to 1E4.

**SOURCE**

AdipoR1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of AdipoR1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46748 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

AdipoR1 (C-14) is recommended for detection of AdipoR1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with AdipoR2.

AdipoR1 (C-14) is also recommended for detection of AdipoR1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for AdipoR1 siRNA (h): sc-60123, AdipoR1 siRNA (m): sc-60124, AdipoR1 shRNA Plasmid (h): sc-60123-SH, AdipoR1 shRNA Plasmid (m): sc-60124-SH, AdipoR1 shRNA (h) Lentiviral Particles: sc-60123-V and AdipoR1 shRNA (m) Lentiviral Particles: sc-60124-V.

Molecular Weight (predicted) of AdipoR1: 42 kDa.

Molecular Weight (observed) of AdipoR1: 49 kDa.

Positive Controls: RD whole cell lysate: sc-364791, MCF7 whole cell lysate: sc-2206 or HEP G2 cell lysate: sc-2227.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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