# PRODUCT DATA SHEET



# **Bioworld Technology CO., Ltd.**

# IRS-1 (R301) Peptide

Cat No.: BS3589P

# **Background**

IRS-1, a major substrate of the insulin receptor, is phosphorylated in response to stimulation of cells by insulin, insulin-like growth factor 1 (IGF-1) and interleukin 4 (IL-4). IRS-1 is phosphorylated on serine, threonine and tyrosine residues in a variety of tissues. An insulin-sensitive serine/threonine kinase casein kinase II mediates a portion of the insulin-stimulated serine/threonine phosphorylation of overexpressed IRS-1 in vivo. Thr 502 is identified as the major casein kinase II-catalyzed phosphorylation site in rat IRS-1, and Ser 99 is an additional phosphorylation site catalyzed by casein kinase II. Thus, casein kinase II-catalyzed phosphorylation of IRS-1 may be a component of the intracellular insulin signaling cascade. IRS-1 contains three putative binding sites for 14-3-3 (Ser 270, Ser 374 and Ser 641) and the motif around Ser 270 is located in the phosphortyrosine binding domain of IRS-1, which is responsible for the interaction with the insulin receptor.

#### **Swiss-Prot**

P35568

# **Applications**

**Blocking** 

#### **Specificity**

This peptide can be used with studies using BS3589 IRS-1 (R301) pAb.

# **Purification & Purity**

Synthetic peptide IRS-1 (R301). (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### **Product**

1 mg/ml in DI water.

### **Storage & Stability**

Store at  $4\,\mathrm{^{\circ}\!C}$  short term. Aliquot and store at -20  $\mathrm{^{\circ}\!C}$  long term. Avoid freeze-thaw cycles.

#### **Research Use**

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