



## IRS1 (Phospho-Ser639) Antibody

#11231

**Catalog Number:** 11231-1, 11231-2

**Amount:** 50µg/50µl, 100µg/100µl

**Swiss-Prot No. :** P35568

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from human IRS-1 around the phosphorylation site of serine 639 (P-K-S<sub>P</sub>-V-S).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

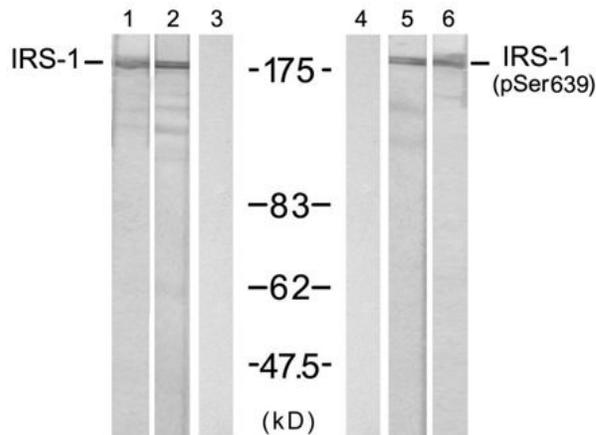
**Specificity/Sensitivity:** IRS-1 (phospho-Ser639) antibody detects endogenous levels of IRS-1 only when phosphorylated at serine 639.

**Reactivity:** Human, Mouse, Rat

**Applications:**

Predicted MW: 180 kd

WB: 1:500~1:1000 IHC: 1:50~1:100

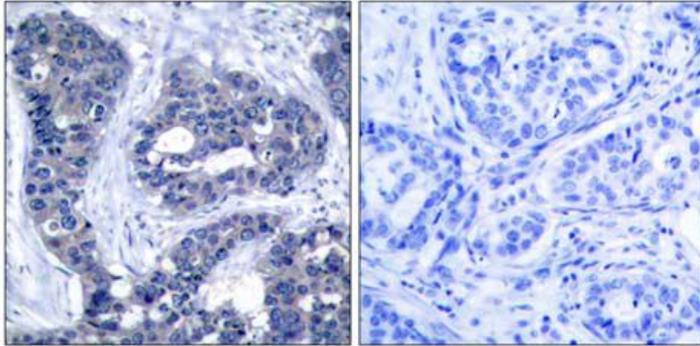


Insulin - + - - + -

PMA + - + - - +

Peptide - - + - - -

Western blot analysis of extracts from 293 cells treated with PMA (0.2µM, 15min) or insulin (100nM, 30min) using IRS-1 (Ab-639) antibody (#21224, Lane 1, 2 and 3) and IRS-1 (phospho-Ser639) antibody (#11231, Lane 4, 5 and 6).



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using IRS-1 (phospho-Ser639) antibody (#11231).

**Background :**

May mediate the control of various cellular processes by insulin. When phosphorylated by the insulin receptor binds specifically to various cellular proteins containing SH2 domains such as phosphatidylinositol 3-kinase p85 subunit or GRB2. Activates phosphatidylinositol 3-kinase when bound to the regulatory p85 subunit

**References:**

- Ozes ON, et al. (2001) Proc Natl Acad Sci U S A; 98(8): 4640-4645  
Tzatsos A, et al. (2006) Mol Cell Biol; 26(1): 63-76  
Steppan CM, et al. (2005) Mol Cell Biol; 25(4): 1569-1575  
Batty IH, et al. (2004) Biochem J; 379(Pt 3): 641-651