anti-IRS-1

Cat #: HM1201
Rabbit polyclonal IgG
0.2 μg/μl, store at 4 °C

For research use only

BACKGROUND
Insulin receptor substrate-1 (IRS-1) is an intracellular docking protein involved in insulin and insulin-like growth factor signaling. It gets phosphorylated in response to insulin stimulation. Upon ligand-induced phosphorylation, IRS-1 immediately associates with a series of SH2 domain-containing signaling intermediates such as PI 3-kinase, GRB2, Syp and Nck. IRS-1 is responsible for several insulin related activities, such as glucose homeostasis, cell growth, cell transformation, apoptosis and insulin signal transduction. IRS1 has been shown to be constitutively activated in cancers such as breast cancer, Wilm's tumors, and adrenal cortical carcinomas.

SPECIFICITY
The antibody reacts with IRS-1 of mouse, rat and human origin.

The antibody can be used in Western blotting, immunoprecipitation and immunstaining.

Molecular weight of IRS-1: 180 kDa.

IMMUNOGEN
Recombinant protein corresponding to the C-terminal human IRS-1.

STORAGE
This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES
1. Myers, M.G. Jr., Backer, J.M., Sun, X.J., Shoelson, S.E., Hu, P., Schlessinger, J., Yoakim, M., Schaffhausen, B., and White, M.F. 1992. IRS-1 activates the phosphatidylinositol 3'- kinase by associating with the src homology 2 domains of p85. Proc. Natl. Acad. Sci. USA 89: 10350-10354.
2. Myers, M.G., Wang, L.-M., Sun, X.J., Zhang, Y., Yenush, L., Schlessinger, J., Pierce, J.H., and White, M.F. 1994. Role of IRS- 1-GRB-2 complexes in insulin signaling. Mol. Cell. Biol. 14: 3577-3587.
3. Kahn, C.R. 1985. The molecular mechanism of insulin action. Ann. Rev. Physiol. 36: 429-451.
4. Kahn, C.R. and Folli, F. 1993. Molecular determinants of insulin action. Horm. Res. 3: 93-101.
5. Sun,X.J., Rothenberg,P., Kahn,C.R., Backer,J.M., Araki,E., Wilden,P.A., Cahill,D.A., Goldstein,B.J. and White,M.F. (1991) Structure of the insulin receptor substrate IRS-1 defines a unique signal transduction protein. Nature 352, 73-77.
6. Gao,Z., Hwang,D., Bataille,F., Lefevre,M., York,D., Quon,M.J. and Ye,J. (2002) Serine phosphorylation of insulin receptor substrate 1 by inhibitor kappa B kinase complex. J. Biol. Chem. 277, 48115-48121

PRODUCTS FROM HYPROMATRIX, INC.

A. AntibodyArray™s:
1. Signal Transduction AntibodyArray™
   Catalog Number HM3000
2. Apoptosis AntibodyArray™
   Catalog Number HM4000
3. Cell Cycle AntibodyArray™
   Catalog Number HM5000

B. Staining AntibodyArray™s
1. Staining AntibodyArray™ I
   Catalog Number HM8100
2. AntibodyArray Staining Apparatus
   Catalog Number HM8000

C. Antibodies
1. HRP-conjugated antibodies
- anti-phosphotyrosine
  Catalog Number HM2040
- anti-phosphoserine
  Catalog Number HM2070
- anti-phosphothreonine
  Catalog Number HM2090

and more…

2. Primary antibodies
Hypromatrix offers a variety of high quality antibodies. For a complete list of antibodies and their specificities, please visit our web site at www.hypromatrix.com.

CONTACT

Hypromatrix, Inc.
100 Barber Avenue
Worcester, MA 01606
USA

Tel: 508-856-7900
Fax: 508-302-0748
Email: contact@hypromatrix.com
Web: www.hypromatrix.com