

Polyclonal Anti-INSR Antibody

Catalog Number: PA1620

Description

Gene Name	insulin receptor
Recommended Protein Name	Insulin receptor
Lot No.	0161212c032031
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: human, rat Predicted to work with: mouse
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human INSR(1353-1372aa RSYEEHIPYTHMNGGKKNR), different from the related rat and mouse sequences by two amino acids.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu, Rat	Ms	-

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB.

Background

INSR(INSULIN RECEPTOR) is a tetramer of 2 alpha and 2 beta subunits that are coded by a single gene and are joined by disulfide bonds, a mechanism parallel to that of its ligand, insulin. It belongs to the large class of tyrosine kinase receptors. The insulin receptor gene is mapped to 19p13.2. The insulin receptor mediates their activity by causing the addition of a phosphate group to particular tyrosines on certain proteins within a cell. The INSR gene spans more than 120 kb and has 22 exons. Functional studies of the INSR SNPs show no effect on mRNA levels or splicing in peripheral blood leukocytes or on binding of insulin to mononuclear cells.

Reference

1. 't Hart, L. M., Stolk, R. P., Dekker, J. M., Nijpels, G., Grobbee, D. E., Heine, R. J., Maassen, J. A. Prevalence of variants in candidate genes for type 2 diabetes mellitus in the Netherlands: the Rotterdam study and the Hoorn study. *J. Clin. Endocr. Metab.* 84: 1002-1006, 1999.
2. Accili, D., Drago, J., Lee, E. J., Johnson, M. D., Cool, M. H., Salvatore, P., Asico, L. D., Jose, P. A., Taylor, S. I., Westphal, H. Early neonatal death in mice homozygous for a null allele of the insulin receptor gene. *Nature Genet.* 12: 106-109, 1996.
3. Ward CW, Lawrence MC (April 2009). "Ligand-induced activation of the insulin receptor: a multi-step process involving structural changes in both the ligand and the receptor".