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Insulin Receptor R Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7654A

Product Information

Application	WB, IHC-P, E
Primary Accession	P14616
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1421
Calculated MW	143720
Antigen Region	27-57

Additional Information

Gene ID	3645
Other Names	Insulin receptor-related protein, IRR, IR-related receptor, Insulin receptor-related protein alpha chain, Insulin receptor-related protein beta chain, INSRR, IRR
Target/Specificity	This Insulin Receptor R antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 27-57 amino acids from the N-terminal region of human Insulin Receptor R.
Dilution	WB~~1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Insulin Receptor R Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	INSRR
Synonyms	IRR
Function	Receptor with tyrosine-protein kinase activity. Functions as a pH sensing

receptor which is activated by increased extracellular pH. Activates an intracellular signaling pathway that involves IRS1 and AKT1/PKB.

Cellular Location Membrane; Single-pass type I membrane protein.

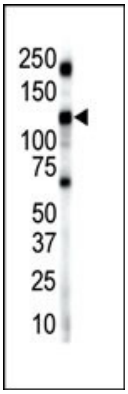
Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about 90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).

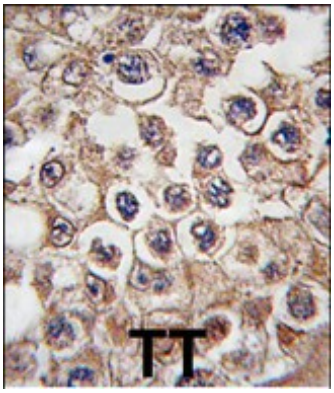
References

Shier, P., et al., J. Biol. Chem. 264(25):14605-14608 (1989).
Whitmore, T.E., et al., Cytogenet. Cell Genet. 87 (1-2), 93-94 (1999).
Hanze, J., et al., Horm. Metab. Res. 31 (2-3), 77-79 (1999).
Shier, P., et al., Cytogenet. Cell Genet. 54 (1-2), 80-81 (1990).
Elmlinger, M.W., et al., Regul. Pept. 84 (1-3), 37-42 (1999).

Images



Western blot analysis of anti-INSRR Pab (Cat. #AP7654a) in mouse brain lysate. INSRR (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



Formalin-fixed and paraffin-embedded human testis tissue reacted with INSRR antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.