10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# 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.

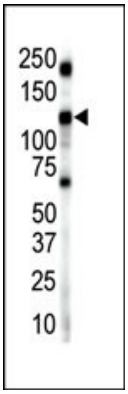
## Background

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).

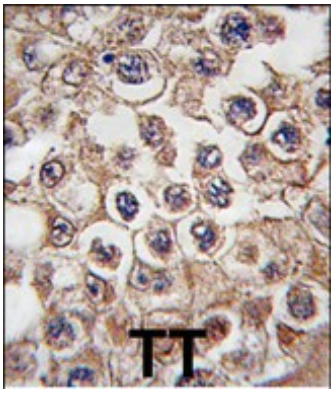
## References

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.