

## 32-1542: INSR Recombinant Protein

**Alternative Name :** Insulin receptor,IR,EC 2.7.10.1,CD220,INSR,HHF5.

### Description

Source : HEK 293. Insulin Receptor Human Recombinant produced in HEK cells is a single, glycosylated, polypeptide chain (aa 28-944 of the short isoform- HIR-A, Uniprot accession # P06213-2 which includes the whole subunit alpha and extracellular domain of subunit beta) containing a total of 927 amino acids, having a molecular mass of 105.9kDa (calculated), though it migrates at approximately 160kDa on SDS PAGE, the INSR is fused to a 2 a.a N-terminal linker, a 2 a.a C-terminal linker and fused to a 6 a.a His tag at C-Terminus. The Human INSR is purified by proprietary chromatographic techniques. Insulin Receptor (INSR) is a receptor tyrosine kinase which mediates the pleiotropic actions of insulin. Binding of insulin to the insulin receptor (INSR) stimulates glucose uptake. Once the precursor signal peptide is removed, the insulin receptor precursor is post-translationally cleaved into 2 chains (alpha and beta) which are covalently linked. Insulin binding initiates phosphorylation of several intracellular substrates, including, insulin receptor substrates (IRS1, 2, 3, 4), SHC, GAB1, CBL and other signaling intermediates. Each of these phosphorylated proteins function as docking proteins for other signaling proteins which contain Src-homology-2 domains (SH2 domain) that specifically recognize different phosphotyrosines residues, including the p85 regulatory subunit of PI3K and SHP2.

### Product Info

<b>Amount :</b>	10 µg
<b>Purification :</b>	Greater than 95.0% as determined by SDS-PAGE.
<b>Content :</b>	INSR was filtered (0.4µm) and lyophilized from 0.5mg/ml in 0.05M phosphate buffer and 0.075M NaCl, pH 7.4.
<b>Storage condition :</b>	Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time.
<b>Amino Acid :</b>	ASHLYPGEVC PGMDIRNHLT RLHELENCV IEGHLQILLM FKTRPEDFRD LSFPLIMIT DYLLFRVYG LESKDLFPN LTVIRGSRFL FNYALVIFEM VHLKELGLYN LMNITRGSVR IEKNNELCYL ATIDWSRILD SVEDNYIVLN KDDNEECGDI CPGTAKGKTN CPATVINGQF VERCWTHSHC QKVCPTICKS HGCTAEGLCC HSECLGNCSQ PDDPTKCVAC RNFYLDGRCV ETCPPPYHF QDWRCVNFSS CQDLHHKCN SRRQGCHQYV IHNNKCIPEC PSGYTMNSSN LLCTPCLGPC PKVCHLEGE KTIDSVTSAQ ELRGCTVING SLIINIRGGN NLAAELEANL GLIEEISGYL KIRRSYALVS LSFFRKLRLI RGETLEIGNY SFYALDNQNL RQLWDWSKHNL TITQGLFF HYNPKLCLSE IHKMEEVSGT KGRQERNDIA LKTNGDQASC ENELLKFSYI RTSFDKILLR WEPYWPPDFR DLLGFMLFYK EAPYQNVTEF DGQDACGSNS WTVVDIDPPL RSNDPKSQNH PGWLMRGLKP WTQYAFVKT LVTFSDERRT YGAKSDIYV QTDATNPSVP LDPISVSNSS SQIILKWKPP SDPNGNITHY LVFWERQAED SELFEDYCL KGLKLPRTW SPPFESEDS QHNQSEYEDS AGECCSCPPT DSQILKELEE SSFRKTFEDY LHNVVFVPRP SRKRRSLGDV GNVTVAVPTV AAFPNTSSTS VPTSPEEHRP FEKVVNKESL VISGLRHFTG YRIELQACNQ DTPEERCSVA AYVSARTMPE AKADDIVGPV THEIFENNVV HLMWQEPKEP NGLIVLYEVS YRRYGDEELH LCVSRKHFAL ERGCLRGLS PGNYSVRIRA TSLAGNGSWT EPTYFYVTDY LDVPSNIAKK LHHHHHH.

### Application Note

It is recommended to add 200µl deionized water to a working concentration of 0.5mg/ml and let the lyophilized pellet dissolve completely. INSR is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

