

Datasheet for ABIN3133871
IRS1 Protein (AA 1-1233) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	IRS1
Protein Characteristics:	AA 1-1233
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IRS1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MASPPDTDGF SDVRKVGYLKPKSMHKRFF VLRAASEAGG PARLEYEYENE KKWRHKSSAP KRSIPLESCF NINKRADSKN KHLVALYTRD EHFAIAADSE AEQDSWYQAL LQLHNRKAHAH HDGAGGGCGG SCSSGSGVGE AGEDLSYDTG PGPAFKEVWQ VILKPKGLGQ TKNLIGIYRL CLTSKTISFV KLNSEAAAVV LQLMNIRRCG HSENFIEV GRSVAVTGPGE FWMQVDDSVV AQNMHETILE AMRAMSDEFPRSKSQSSSS CSNPISVPLR RHHLNPPPS QVGLTRRSRT ESITATSPAS MVGGKPGSFR VRASSDGET MSRPASVDGS PVSPSTNRTH AHRHRGSSRL HPPLNHSRSI PMPSSRCSPS ATSPVSLSSS STSGHGSTSD CLFPRRSSAS VSGSPSDGGF ISSDEYGSSP CDFRSSFRSV TPDLSLGHPPP ARGEEELSNI ICMGGKGAST LAAPNGHYIL SRGGNGHRYI PGANLGTSPA LPGDEAAGAA DLNDRFRKRT HSAGTSPTIS HQKTPSQSSV ASIEEYEMM PAAYPPGGGS GGRLPGYRHS AFVPTHSTPE EGLEMHHLER RGGHHRPDTS NLHTDDGYMP MSPGVAPVPS NRKGNLDYMP MSPKSVSAPQ QIINPIRRHP QRVDPNGYMM MSPSGSCSPD IGGGSSSSSS ISAAPSGSSY GKPTWNGVGG HHTHALPHAK PPVESGGGKL
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LPCTGDYMMNM SPVGDSNTSS PSECYYGPED PQHKPVLSYY SLPRSFKHTQ RPGEPEEGAR
HQHLRLSSSS GRLRYTATAE DSSSSTSSDS LGGGYCGARP ESSLTHPHHH VLQPHLPRKV
DTAAQTNSRL ARPTRLGLD PKASTLPRVR EQQQQQQSSL HPPEPKSPGE YVNIEFGSGQ
PGYLAGPATS RSSPSVRCPP QLHPAPREET GSEYMNMDL GPGRRTWQE SGGVELGRIG
PAPPGSATVC RPTRSVNSR GDYMTMQIGC PRQSYVDTSV VAPVSYADMR TGIAAEKASL
PRPTGAAPPP SSTASSASV TPQGATAEQA THSSLLGGPQ GPGGMSAFTR VNLSPNHNQS
AKVIRADTQG CRRRHSSSETF SAPTRAGNTV PFGAGAAVGG SGGGGGGGSE DVKRHSSASF
ENVWLRPGDL GGVSKEAPV CGAAGGLEKS LNYIDLDAK EHSQDCPSQQ QSLPPPPPHQ
PLGSNEGNRP RRSEDLSNY ASISFQKQPE DRQ

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Irs1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate

Product Details

- fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target: IRS1

Alternative Name: Irs1 ([IRS1 Products](#))

Background: May mediate the control of various cellular processes by insulin. When phosphorylated by the insulin receptor binds specifically to various cellular proteins containing SH2 domains such as phosphatidylinositol 3-kinase p85 subunit or GRB2. Activates phosphatidylinositol 3-kinase when bound to the regulatory p85 subunit (By similarity). {ECO:0000250}.

Molecular Weight: 131.7 kDa Including tag.

UniProt: [P35569](#)

Pathways: [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Positive Regulation of Peptide Hormone Secretion](#), [Hormone Transport](#), [Negative Regulation of Hormone Secretion](#), [Response to Growth Hormone Stimulus](#), [Carbohydrate Homeostasis](#), [Regulation of Carbohydrate Metabolic Process](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Application Details

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process