

Datasheet for ABIN3137579

IRS4 Protein (AA 1-1216) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	IRS4
Protein Characteristics:	AA 1-1216
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IRS4 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MASCSFSGHQ ALRRLRASAA AAASAALAAV ATTPLLSSGT RTALIGTGSS CPGAMWLSTA</p> <p>TGSRSDSESE EEDLPVGDEV CKRGYLRKQK HGHRRYFVLK LETADAPARL EYYRNARKFR</p> <p>HSVRAAAAAA EAAASGAAVP ALIPPRRVII LYQCFSVSQR ADARYRHIIA LFTQDEYFAM</p> <p>VAENESEQES WYLLLSRLIL ESKRRRCGTL GALPDGEPAA LAAAAAEPP FYKDVWQVVV</p> <p>KPRGLGHRKE LSGVFRLCLT DEEVVFVRLN TEVASVVVQL LSIRRCGHSE QYFFLEVGRS</p> <p>TVIGPGELWM QVDDSVVAQN MHELFLEKMR ALCADAYRAR CRSYSISIGA HLLTLLSTRR</p> <p>HLGLLPLEPG GWLRRYGLEQ FCRLRAIRER EEMLFTRRFI SPREPPPPFR RGRGHLPRAR</p> <p>RSRRAASVPP SLFRRSAPSP GRIPQPEDVP NDRAREASGS SSGNTEEKDK EGEENRGDC</p> <p>IPMNNWGSNG GRGSGGGRGS SGQGSSSQGS GGRQSGGGGQ GSGGQGAGGN QCSGNGQGTA</p> <p>GGHGSGGGGH GSGGGQRPD GHGSGGGKNS GSGKNSDDGD RGKSVKKRSY FGKFTQSKQQ</p> <p>QTLPPPPPPP PAAGATGGKG KSGGRFRLYF CADRGTKERK EAKEVRDMET SGGATRGPYR</p>

ARAFDEDEDD PYVPMRPGVA APLACSSDYM PMAPQNSSAS TKRHSRSPFE DSRGYMMMFP
RVSPPPVPS APKAPDTNKG DDSKDNDSDS DYMFMAGAG AIPKNPPNAQ GGSSSKSWSS
YFSLPSPFQS SPLGQSDHSE YVPMLPGKFL GSGLHKEASF SQGTKNVSSK PSTEASFSKP
EDKGSSAKPS DDVPPMNKAK EPNHLSFIAK GTQVKPKPLN PTQERREAAG SRDYINIDFI
KRERLVPSS AQGLPDMRGV VTDPAFTA GYLNVFEGVP FPNPTIRLSD LLRVLPGANS
IPLAGTRWPF PGSAIGSIVE AGEYIEVIFN PAMTPAMSFA DSAICYDAQT GQIYVVDPF
ECCMDVSLSP GRCSEPPVA RLRREEAQR RRPQRSQSL FASTRAAVSA FPTDSLDRDF
PAASAVIAAP AEAPLLAVSR ALAVVSALAA APSIGDVFAG FRAAAGVDSA SARGFQPVAG
AQAVREFQDL AAGWNPALN HRARGEDLAA GAAAPPPPPR QIWWLRPQER ADSEDDDDDD
DDIYVRMDFA RRDYRK

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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 try to ensure that you receive soluble 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Product Details

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALICE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	IRS4
Alternative Name:	Irs4 (IRS4 Products)
Background:	<p>Insulin receptor substrate 4 (IRS-4) (Phosphoprotein of 160 kDa) (pp160),FUNCTION: Acts as an interface between multiple growth factor receptors possessing tyrosine kinase activity, such as insulin receptor, IGF1R and FGFR1, and a complex network of intracellular signaling molecules containing SH2 domains. Involved in the IGF1R mitogenic signaling pathway. Promotes the AKT1 signaling pathway and BAD phosphorylation during insulin stimulation without activation of RPS6KB1 or the inhibition of apoptosis. Interaction with GRB2 enhances insulin-stimulated mitogen-activated protein kinase activity. May be involved in nonreceptor tyrosine kinase signaling in myoblasts. Plays a pivotal role in the proliferation/differentiation of hepatoblastoma cell through EPHB2 activation upon IGF1 stimulation. May play a role in the signal transduction in response to insulin and to a lesser extent in response to IL4 and GH on mitogenesis. Plays a role in growth, reproduction and glucose homeostasis. May act as negative regulators of the IGF1 signaling pathway by suppressing the function of IRS1 and IRS2. {ECO:0000269 PubMed:10403832, ECO:0000269 PubMed:10644546, ECO:0000269 PubMed:11113178, ECO:0000269 PubMed:12618213}.</p>
Molecular Weight:	130.1 kDa
UniProt:	Q9Z0Y7

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.

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Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months