

Datasheet for ABIN3093470
KSR2 Protein (AA 1-950) (Strep Tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	KSR2
Protein Characteristics:	AA 1-950
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KSR2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MDEENMTKSE EQQPLSLQKA LQQCELVQNM IDLSISNLEG LRTKCATSND LTQKEIRTL SKLVKYFSRQ LSCKKKVALQ ERNAELDGFP QLRHWFRIVD VRKEVLEEIS PGQLSLEDLL EMTDEQVCET VEKYGANREE CARLNASLSC LRNVHMSGGN LSKQDWTIQW PTTETGKENN PVCPEPTPW IRT HLSQSPR VPSKCVQHYC HTSPTPGAPV YTHVDRLTVD AYPGLCPPPP LESGHRS LPP SPRQRHAVRT PPRTPNIVTT VTPPGTPPMR KKNKLKPPGT PPPSSRKLIH LIPGFTALHR SKSHEFQLGH RVDEAHTPKA KKKSKPLNLK IHSSVGSCEN IPSQQRSPLL SERSLR SFFV GHAPFLPSTP PVHTEANFSA NTLSPVRWSP QIPRRDLGNS IKHRFSTKYW MSQTCTVCGK GMLFGLKCKN CKLKCHNKCT KEAPPCHLLI IHRGDPARLV RTESVPCDIN NPLRKPPRYS DLHISQTLPK TNKINKDHIP VPYQPDSSSN PSSTTSSTPS SPAPPLPPSA TPPSPLHPSP QCTRQKKNFN LPASHYYKYK QQFIFPDVVP VPETPTRAPQ VILHPVTSNP ILEGNPLLQI EVEPTSENEE VHDEAEESD DFEEMNLSLL SARSFPRKAS QTSIFLQEWD IPFEQLEIGE LIGKGRFGQV YHGRWHGEVA IRLIDIERDN EDQLKAFKRE VMAYRQTRHE
-----------	--

NVVLFMGACM SPPHLAIITS LCKGRTLYSV VRDAKIVLDV NKTRQIAQEI VKGMGYLHAK
GILHKDLKSK NVFYDNGKVV ITDFGLFSIS GVLQAGRRED KLRIQNGWLC HLAPEIIRQL
SPDTEEDKLP FSKHSDVFAL GTIWYELHAR EWPFKTQPAE AIIWQMGTGM KPNLSQIGMG
KEISDILLFC WAFEQEERPT FTKLMDMLEK LPKRNRRLSH PGHFWKSAEL

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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!

Concentration:

- 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.

Product Details

- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	KSR2
Alternative Name:	KSR2 (KSR2 Products)
Background:	Kinase suppressor of Ras 2 (hKSR2) (EC 2.7.11.1),FUNCTION: Location-regulated scaffold connecting MEK to RAF. Has very low protein kinase activity and can phosphorylate MAP2K1 at several Ser and Thr residues with very low efficiency (in vitro). Acts as MAP2K1/MEK1-dependent allosteric activator of BRAF, upon binding to MAP2K1/MEK1, dimerizes with BRAF and promotes BRAF-mediated phosphorylation of MAP2K1/MEK1 (PubMed:29433126). Interaction with BRAF enhances KSR2-mediated phosphorylation of MAP2K1 (in vitro). Blocks MAP3K8 kinase activity and MAP3K8-mediated signaling. Acts as a negative regulator of MAP3K3-mediated activation of ERK, JNK and NF-kappa-B pathways, inhibiting MAP3K3-mediated interleukin-8 production. {ECO:0000269 PubMed:12975377, ECO:0000269 PubMed:16039990, ECO:0000269 PubMed:21441910, ECO:0000269 PubMed:29433126}.
Molecular Weight:	107.6 kDa
UniProt:	Q6VAB6

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
--------------------	---

Application Details

	as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)



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