

# Datasheet for ABIN3093157

# Inversin Protein (INVS) (AA 1-1065) (Strep Tag)



## Overview

Quantity:	250 μg
Target:	Inversin (INVS)
Protein Characteristics:	AA 1-1065
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Inversin protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MNKSENLLFA GSSLASQVHA AAVNGDKGAL QRLIVGNSAL KDKEDQFGRT PLMYCVLADR
	LDCADALLKA GADVNKTDHS QRTALHLAAQ KGNYRFMKLL LTRRANWMQK DLEEMTPLHL
	TTRHRSPKCL ALLLKFMAPG EVDTQDKNKQ TALHWSAYYN NPEHVKLLIK HDSNIGIPDV
	EGKIPLHWAA NHKDPSAVHT VRCILDAAPT ESLLNWQDYE GRTPLHFAVA DGNVTVVDVL
	TSYESCNITS YDNLFRTPLH WAALLGHAQI VHLLLERNKS GTIPSDSQGA TPLHYAAQSN
	FAETVKVFLK HPSVKDDSDL EGRTSFMWAA GKGSDDVLRT MLSLKSDIDI NMADKYGGTA
	LHAAALSGHV STVKLLLENN AQVDATDVMK HTPLFRACEM GHKDVIQTLI KGGARVDLVD
	QDGHSLLHWA ALGGNADVCQ ILIENKINPN VQDYAGRTPL QCAAYGGYIN CMAVLMENNA
	DPNIQDKEGR TALHWSCNNG YLDAIKLLLD FAAFPNQMEN NEERYTPLDY ALLGERHEVI
	QFMLEHGALS IAAIQDIAAF KIQAVYKGYK VRKAFRDRKN LLMKHEQLRK DAAAKKREEE
	NKRKEAEQQK GRRSPDSCRP QALPCLPSTQ DVPSRQSRAP SKQPPAGNVA QGPEPRDSRG

SPGGSLGGAL QKEQHVSSDL QGTNSRRPNE TAREHSKGQS ACVHFRPNEG SDGSRHPGVP SVEKSRGETA GDERCAKGKG FVKQPSCIRV AGPDEKGEDS RRAAASLPPH DSHWKPSRRH DTEPKAKCAP QKRRTQELRG GRCSPAGSSR PGSARGEAVH AGQNPPHHRT PRNKVTQAKL TGGLYSHLPQ STEELRSGAR RLETSTLSED FQVSKETDPA PGPLSGQSVN IDLLPVELRL QIIQRERRRK ELFRKKNKAA AVIQRAWRSY QLRKHLSHLR HMKQLGAGDV DRWRQESTAL LLQVWRKELE LKFPQTTAVS KAPKSPSKGT SGTKSTKHSV LKQIYGCSHE GKIHHPTRSV KASSVLRLNS VSNLQCIHLL ENSGRSKNFS YNLQSATQPK NKTKP

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 posttranslational 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 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: Inversin (INVS) Alternative Name: INVS (INVS Products) Background: Inversin (Inversion of embryo turning homolog) (Nephrocystin-2), FUNCTION: Required for normal renal development and establishment of left-right axis. Probably acts as a molecular switch between different Wnt signaling pathways. Inhibits the canonical Wnt pathway by targeting cytoplasmic disheveled (DVL1) for degradation by the ubiquitin-proteasome. This suggests that it is required in renal development to oppose the repression of terminal differentiation of tubular epithelial cells by Wnt signaling. Involved in the organization of apical junctions in kidney cells together with NPHP1, NPHP4 and RPGRIP1L/NPHP8 (By similarity). Does not seem to be strictly required for ciliogenesis (By similarity). {ECO:0000250, ECO:0000269|PubMed:15852005, ECO:0000269|PubMed:18371931}. Molecular Weight: 117.8 kDa UniProt: 09Y283 **Application Details** In addition to the applications listed above we expect the protein to work for functional studies **Application Notes:** as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though. Comment: 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.

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# **Application Details**

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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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months