

Datasheet for ABIN3092015

## DACT2 Protein (AA 1-774) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	DACT2
Protein Characteristics:	AA 1-774
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DACT2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MWTPGGPPGS AGWDRRLGA RLRAAFAGLQ ELQGLRATQQ ERVRGALALQ PPPAPAAPCG</p> <p>PHGLHGPEQQ LEAALAALQE QLSRLRQQDI GLKTHLDQLD LQISKLQLDV GTASGEALDS</p> <p>DSRPSSGFYE MSDGGSCSL SASCASVSDH ISPSLGSLLP VAQAHKARPS MGDWRPRSVD</p> <p>ETTPAWRPQ ATEEGARPPG SVEDAGQPWG TFWPRPVSTG DLDRALPADT GLQKASADAE</p> <p>LLGLLCQGV D IPLHVPDPKY RQDLVSQGG EVYPYPSPLH AVALQSPLFV LTKETPQRGG</p> <p>PSFPRESRPG PAGLNTIQTG PVLEAGPARA RAYIDRLLHL WGRETPAKGS EGEQGPLRHA</p> <p>ASPSQRQGG WSTDGGGRLL VFAPGREDEG GPAQSRGAGR GGPQQQGYMP LEGPQQSGSL</p> <p>PEEGSKPSNS CVLRETMVQA SPSSKAQQT SAQDYGRGNI ISPSRMLDKS PSPASGHFAH</p> <p>PSFAASLKMG PPKSKAEIK RSPMDKVLRF ARQPLLLLD PEGAHAAPQP SLEWDPAHWP</p> <p>TGRGGLQRRP ALAWEAPGRS CSESTLYPMP VLVPLAVAPQ ESHRTSAQAL FPFEASLLTS</p> <p>VARRKHRRWQ STVEISARAR LASCPEENLG PPRPVARRAG GPLARGRPSL VRQDAYTRSD</p>

SEPSKHSAC DPRFPSVIPE TSEGESSDHT TNRFGDRESS SSDEEGGAQS RDCDLALGYV  
AAGHAELAWT QEAPVSSGPL LSPVPKLCRI KASKALKKKI RRFQPTALKV MTMV

**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.**

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### 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!

#### 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.

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### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

## Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: DACT2

Alternative Name: DACT2 ([DACT2 Products](#))

Background: Dapper homolog 2 (Dapper antagonist of catenin 2),FUNCTION: Involved in regulation of intracellular signaling pathways during development. Negatively regulates the Nodal signaling pathway, possibly by promoting the lysosomal degradation of Nodal receptors, such as TGFBR1. May be involved in control of the morphogenetic behavior of kidney ureteric bud cells by keeping cells epithelial and restraining their mesenchymal character. May play an inhibitory role in the re-epithelialization of skin wounds by attenuating TGF-beta signaling (By similarity). {ECO:0000250}.

Molecular Weight: 82.7 kDa

UniProt: [Q5SW24](#)

## 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: 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!

Restrictions: For Research Use only

## Handling

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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