

Datasheet for ABIN3136913

DACH2 Protein (AA 1-634) (Strep Tag)



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Overview

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|-------------------------------|--|
| Quantity: | 250 µg |
| Target: | DACH2 |
| Protein Characteristics: | AA 1-634 |
| Origin: | Mouse |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This DACH2 protein is labelled with Strep Tag. |
| Application: | ELISA, SDS-PAGE (SDS), Western Blotting (WB) |

Product Details

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|-----------|--|
| Brand: | AliCE® |
| Sequence: | <p>MAVSAPPVIS ATSSSAGVPG GLFRAEPLYS SPGEPPRLTP NMINSFMANN HNGSVLGGGI</p> <p>GGGSGGSSNT NTNECRMVDM HGVKVASFLM DGQELICLPQ VFDLFLKHLV GGLHTVYTKL</p> <p>KRLDISPVVC TVEQVRILRG LGAIQPGVNR CKLITRKDFE TLFTDCTNAR RKRQMTRKQA</p> <p>VNSSRPGRPP KRSLGVLQDN ARLLPHAVPG LLSPGLITPT GITAAAMAEA MKLQKMKLMA</p> <p>MNTLQGNGSQ NGTESEPDDL NSTTGSESS WDKDKIQSPL AASGPQHgia HAALAGQPGL</p> <p>GGAPTLNPLQ QNHLLSNRLD LPFMMMPHPL LPVSLPPASV AMAMNQMNHL NTIANMAAAA</p> <p>QIHSPLSRAG ASVIKERIPE SPSPAPSLEE SHRPGSQTS HPSSSVSSSP SQMDHHSERM</p> <p>VMMPNNREEL IVDQDNGQSI KKFQRDNKEE VPAQIPVMKS PLDKIQLAPG QALHPGFPGP</p> <p>FIFADSLSSV ETLLTNIQGL LKVALDNARI QEKQIQEKK ELRIELFRER EIRENLERQL</p> <p>AVELQSRSTM QKRLKKEKKA KRKLQEALF ESKRREQVEQ ALKQATSGDS GLRMLKDSGI</p> <p>PDIEIENSGT PHDSAAMQGG NYYCLAMAQQ LCSA</p> |

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!

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).

Product Details

Grade: custom-made

Target Details

Target: DACH2

Alternative Name: Dach2 ([DACH2 Products](#))

Background: Dachshund homolog 2 (Dach2),FUNCTION: Transcription factor that is involved in regulation of organogenesis. Seems to be a regulator for SIX1 and SIX6. Seems to act as a corepressor of SIX6 in regulating proliferation by directly repressing cyclin-dependent kinase inhibitors, including the p27Kip1 promoter. Is recruited with SIX6 to the p27Kip1 promoter in embryonal retina. SIX6 corepression seems also to involve NCOR1, TBL1, HDAC1 and HDAC3. May be involved together with PAX3, SIX1, and EYA2 in regulation of myogenesis. In the developing somite, expression of DACH2 and PAX3 is regulated by the overlying ectoderm, and DACH2 and PAX3 positively regulate each other's expression. Probably binds to DNA via its DACHbox-N domain. {ECO:0000269|PubMed:12112464, ECO:0000269|PubMed:12130660}.

Molecular Weight: 68.6 kDa

UniProt: [Q925Q8](#)

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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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

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