

Datasheet for ABIN7553905
FADS2 Protein (AA 1-444) (His tag)



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Overview

Quantity:	1 mg
Target:	FADS2
Protein Characteristics:	AA 1-444
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FADS2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant FADS2 Protein expressed in mammalian cells.
Sequence:	MGKGGNQGEG AAEREVSPT FSWEIQKHN LRTDRWLVID RKVYNITKWS IQHPGGQRVI GHYAGEDATD AFRAFHPDLE FVGKFLKPLL IGEAPEEPS QDHGKNSKIT EDFRALRKTA EDMNLFKTNH VFFLLLLAHI IALESIAWFT VFYFGNGWIP TLITAFVLAT SQAQAGWLQH DYGHLSVYRK PKWNHLVHKF VIGHLKGASA NWWNHRHFQH HAKPNIFHKD PDVNMLHVFV LGEWQPIEYG KKKLKYLPYN HQHEYFFLIG PPLLIPMYFQ YQIIMTMIVH KNWVDLAWAV SYYIRFFITY IPFYGILGAL LFLNFIRFLE SHWFVWVTQM NHIVMEIDQE AYRDWFSSQL TATCNVEQSF FNDWFSGHLN FQIEHHLFPT MPRHNLHKIA PLVKSLCAKH GIEYQEKPLL RALLDIIRSL KKSGLWDLA YLHK Sequence without tag. The proposed Purification-Tag is based on experiences 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Product Details

Characteristics:

Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target:

FADS2

Alternative Name:

FADS2 ([FADS2 Products](#))

Background:

Acyl-CoA 6-desaturase (EC 1.14.19.3) (Delta(6) fatty acid desaturase) (D6D) (Delta(6) desaturase) (Delta-6 desaturase) (Fatty acid desaturase 2),FUNCTION: Involved in the biosynthesis of highly unsaturated fatty acids (HUFA) from the essential polyunsaturated fatty acids (PUFA) linoleic acid (LA) (18:2n-6) and alpha-linolenic acid (ALA) (18:3n-3) precursors, acting as a fatty acyl-coenzyme A (CoA) desaturase that introduces a cis double bond at carbon 6 of the fatty acyl chain. Catalyzes the first and rate limiting step in this pathway which is the desaturation of LA (18:2n-6) and ALA (18:3n-3) into gamma-linoleate (GLA) (18:3n-6) and stearidonate (18:4n-3), respectively (PubMed:12713571). Subsequently, in the biosynthetic pathway of HUFA n-3 series, it desaturates tetracosapentaenoate (24:5n-3) to tetracosahexaenoate (24:6n-3), which is then converted to docosahexaenoate (DHA)(22:6n-3), an important lipid for nervous system function (By similarity). Desaturates hexadecanoate (palmitate) to produce 6Z-hexadecenoate (sapienate), a fatty acid unique to humans and major component of human sebum, that has been implicated in the development of acne and may

Target Details

have potent antibacterial activity (PubMed:12713571). It can also desaturate (11E)-octadecenoate (trans-vaccenoate, the predominant trans fatty acid in human milk) at carbon 6 generating (6Z,11E)-octadecadienoate (By similarity). In addition to Delta-6 activity, this enzyme exhibits Delta-8 activity with slight biases toward n-3 fatty acyl-CoA substrates (By similarity). {ECO:0000250|UniProtKB:B8R1K0, ECO:0000250|UniProtKB:Q9Z122, ECO:0000269|PubMed:12713571}.

Molecular Weight: 52.3 kDa

UniProt: [O95864](#)

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months