Datasheet for ABIN7563388

HSD11B2 Protein (AA 1-386) (His tag)

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Overview

Quantity:	1 mg
Target:	HSD11B2
Protein Characteristics:	AA 1-386
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HSD11B2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Hsd11b2 Protein expressed in mammalian cells.
Sequence:	MERWPWPSGG AWLLVAARAL LQLLRSDLRL GRPLLAALAL LAALDWLCQR LLPPPAALVV LAGAGWIALS RLARPPRLPV ATRAVLITGC DTGFGKETAK KLDAMGFTVL ATVLDLNSPG ALELRDLCSP RLKLLQMDLT KAEDISRVLE ITKAHTASTG LWGLVNNAGL NIVVADVELS PVATFRKCME VNFFGALELT KGLLPLLRHS RGRIVTVGSP AGDMPYPCLA AYGTSKAAIA LLMDTFGCEL LPWGIKVSII KPGCFKTDAV TNVNLWEKRK QLLLANIPRE LLQAYGEDYI EHVHGQFLNS LRMALPDLSP VVDAIIDALL AAQPRSRYYP GRGLGLMYFI HHYLPEGLRR CFLQNFFINH LLPRALRPGQ HGPAPA **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.
Characteristics:	Key Benefits:

Product Details

- 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:	HSD11B2
Alternative Name:	Hsd11b2 (HSD11B2 Products)
Background:	11-beta-hydroxysteroid dehydrogenase type 2 (11-DH2) (11-beta-HSD2) (EC 1.1.1.-) (Corticosteroid 11-beta-dehydrogenase isozyme 2) (NAD-dependent 11-beta-hydroxysteroid dehydrogenase),FUNCTION: Catalyzes the conversion of biologically active 11beta-hydroxyglucocorticoids (11beta-hydroxysteroid) such as corticosterone, to inactive 11-ketoglucocorticoids (11-oxosteroid) such as 11-dehydrocorticosterone, in the presence of NAD(+) (Probable) (PubMed:30902677, PubMed:22796344). Functions as a dehydrogenase (oxidase), thereby decreasing the concentration of active glucocorticoids, thus protecting the nonselective mineralocorticoid receptor from occupation by glucocorticoids (PubMed:7664690). Plays an important role in maintaining glucocorticoids balance during preimplantation and protects the fetus from excessive maternal corticosterone exposure (PubMed:31600723). Catalyzes the oxidation of 11beta-hydroxytestosterone (11beta,17beta-dihydroxyandrost-4-ene-3-one) to 11-ketotestosterone (17beta-hydroxyandrost-4-ene-3,11-dione), a major bioactive androgen (PubMed:22796344). Catalyzes the conversion of 11beta-hydroxyandrostenedione (11beta-hydroxyandrost-4-ene-3,17-dione) to 11-ketoandrostenedione

Target Details

	(androst-4-ene-3,11,17-trione), which can be further metabolized to 11-ketotestosterone (By similarity). Converts 7-beta-25-dihydroxycholesterol to 7-oxo-25-hydroxycholesterol in vitro (By similarity). 7-beta-25-dihydroxycholesterol (not 7-oxo-25-hydroxycholesterol) acts as a ligand for the G-protein-coupled receptor (GPCR) Epstein-Barr virus-induced gene 2 (EBI2) and may thereby regulate immune cell migration (By similarity). {ECO:0000250|UniProtKB:P80365, ECO:0000269|PubMed:22796344, ECO:0000269|PubMed:30902677, ECO:0000303|PubMed:31600723, ECO:0000303|PubMed:7664690, ECO:0000305|PubMed:31600723}.
Molecular Weight:	42.2 kDa
UniProt:	P51661
Pathways:	Steroid Hormone Biosynthesis, Regulation of Systemic Arterial Blood Pressure by Hormones

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