Datasheet for ABIN7546363

SULT1A1 Protein (AA 1-295) (His tag)

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Overview

Quantity:	1 mg
Target:	SULT1A1
Protein Characteristics:	AA 1-295
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SULT1A1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant SULT1A1 Protein expressed in mammalian cells.
Sequence:	MELIQDTSRP PLEYVKGVPL IKYFAEALGP LQSFQARPDD LLISTYPKSG TTWVSQILDM IYQGGDLEKC HRAPIFMRVP FLEFKAPGIP SGMETLKDTP APRLLKTHLP LALLPQTLLD QKVKVVYVAR NAKDVAVSYY HFYHMAKVHP EPGTWDSFLE KFMVGEVSYG SWYQHVQEWW ELSRTHPVLY LFYEDMKENP KREIQKILEF VGRSLPEETV DFVVQHTSFK EMKKNPMTNY TTVPQEFMDH SISPFMRKGM AGDWKTTFTV AQNERFDADY AEKMAGCSLS FRSEL **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:	SULT1A1
Alternative Name:	SULT1A1 (SULT1A1 Products)
Background:	Sulfotransferase 1A1 (ST1A1) (EC 2.8.2.1) (Aryl sulfotransferase 1) (HAST1/HAST2) (Phenol sulfotransferase 1) (Phenol-sulfating phenol sulfotransferase 1) (P-PST 1) (ST1A3) (Thermostable phenol sulfotransferase) (Ts-PST),FUNCTION: Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the sulfate conjugation of a wide variety of acceptor molecules bearing a hydroxyl or an amine groupe. Sulfonation increases the water solubility of most compounds, and therefore their renal excretion, but it can also result in bioactivation to form active metabolites. Displays broad substrate specificity for small phenolic compounds. Plays an important role in the sulfonation of endogenous molecules such as steroid hormones and 3,3'-diiodothyronin (PubMed:16221673, PubMed:12471039, PubMed:22069470, PubMed:21723874, PubMed:10199779, PubMed:7834621). Mediates the sulfate conjugation of a variety of xenobiotics, including the drugs acetaminophen and minoxidil (By similarity). Mediates also the metabolic activation of carcinogenic N-hydroxyarylamines leading to highly reactive intermediates capable of forming DNA adducts, potentially resulting in mutagenesis (PubMed:7834621). May play a role in gut

Target Details

	microbiota-host metabolic interaction. O-sulfonates 4-ethylphenol (4-EP), a dietary tyrosine-derived metabolite produced by gut bacteria. The product 4-EPS crosses the blood-brain barrier and may negatively regulate oligodendrocyte maturation and myelination, affecting the functional connectivity of different brain regions associated with the limbic system. {ECO:0000250|UniProtKB:P17988, ECO:0000269|PubMed:10199779, ECO:0000269|PubMed:12471039, ECO:0000269|PubMed:16221673, ECO:0000269|PubMed:21723874, ECO:0000269|PubMed:22069470, ECO:0000269|PubMed:35165440, ECO:0000269|PubMed:7834621}.
Molecular Weight:	34.2 kDa
UniProt:	P50225

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