

Datasheet for ABIN7546787

Aromatase Protein (AA 1-503) (His tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	Aromatase (CYP19A1)
Protein Characteristics:	AA 1-503
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Aromatase protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinant CYP19A1 Protein expressed in mammalian cells.
Sequence:	MVLEMLNPIH YNITSIVPEA MPAATMPVLL LTGLFLLVWN YEGTSSIPGP GYCMGIGPLI SHGRFLWMGI GSACNYNRYV YGEFMRVWIS GEETLIISKS SSMFHIMKHN HYSSRFGSKL GLQCIGMHEK GIIFNNPEL WKTTRPFFMK ALSGPGLVRM VTVCAESLKT HLDRLLEEVN ESGYVDVLT LRRVMLDTSN TLFLRIPLDE SAIVVKIQGY FDAQALLIK PDIFFKISWL YKKEYSVKD LKDAIEVIA EKRRRISTEE KLEECMDFAT ELILAEKRGD LTRENVNQCI LEMLIAAPDT MSVSLFFMLF LIAKHPNVEE AIIKEIQTVI GERDIDDI QKLKVMENFI YESMRYQPVV DLVMRKALED DVIDGYPVKK GTNIILNIGR MHRLEFFPKP NEFTLENFAK NVPYRYFQPF GFGPRGCAGK YIAMVMMKAI LVTLRRFHV KTLQGQCVES IQKIHDLSLH PDETKNMLEM IFTPRNSDRC LEH 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.

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, Western Blot

Grade:

custom-made

Target Details

Target:

Aromatase (CYP19A1)

Alternative Name:

CYP19A1 ([CYP19A1 Products](#))

Background:

Aromatase (EC 1.14.14.14) (CYPXIX) (Cytochrome P-450AROM) (Cytochrome P450 19A1) (Estrogen synthase),FUNCTION: A cytochrome P450 monooxygenase that catalyzes the conversion of C19 androgens, androst-4-ene-3,17-dione (androstenedione) and testosterone to the C18 estrogens, estrone and estradiol, respectively (PubMed:27702664, PubMed:2848247). Catalyzes three successive oxidations of C19 androgens: two conventional oxidations at C19 yielding 19-hydroxy and 19-oxo/19-aldehyde derivatives, followed by a third oxidative aromatization step that involves C1-beta hydrogen abstraction combined with cleavage of the C10-C19 bond to yield a phenolic A ring and formic acid (PubMed:20385561). Alternatively, the third oxidative reaction yields a 19-norsteroid and formic acid. Converts dihydrotestosterone to delta1,10-dehydro 19-nordihydrotestosterone and may play a role in homeostasis of this potent androgen (PubMed:22773874). Also displays 2-hydroxylase activity toward estrone (PubMed:22773874). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by

Target Details

NADPH via cytochrome P450 reductase (CPR, NADPH-ferrihemoprotein reductase)
(PubMed:20385561, PubMed:22773874). {ECO:0000269|PubMed:20385561,
ECO:0000269|PubMed:22773874, ECO:0000269|PubMed:27702664,
ECO:0000269|PubMed:2848247}.

Molecular Weight: 57.9 kDa

UniProt: [P11511](#)

Pathways: [Metabolism of Steroid Hormones and Vitamin D](#), [Steroid Hormone Biosynthesis](#), [C21-Steroid Hormone Metabolic Process](#), [Carbohydrate Homeostasis](#)

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.

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