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# HSD17B8 Blocking Peptide (N-term)

**Synthetic peptide**
**Catalog # BP21740a**

## Specification

### HSD17B8 Blocking Peptide (N-term) - Product Information

Primary Accession Q92506

### HSD17B8 Blocking Peptide (N-term) - Additional Information

**Gene ID** 7923

**Other Names**
Estradiol 17-beta-dehydrogenase 8, 17-beta-hydroxysteroid dehydrogenase 8, 17-beta-HSD 8, 3-oxoacyl-[acyl-carrier-protein] reductase, 111-, Protein Ke6, Ke-6, Really interesting new gene 2 protein, Testosterone 17-beta-dehydrogenase 8, HSD17B8, FABGL, HKE6, RING2

**Target/Specificity**
The synthetic peptide sequence is selected from aa 53-67 of HUMAN HSD17B8

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### HSD17B8 Blocking Peptide (N-term) - Protein Information

**Name** HSD17B8

**Synonyms** FABGL, HKE6, RING2, SDR30C1

**Function**
Required for the solubility and assembly of the heterotetramer 3-ketoacyl-[acyl carrier protein] (ACP) reductase functional complex (KAR or KAR1) that forms part of the mitochondrial fatty acid synthase (mtFAS). Alpha-subunit of the KAR complex that acts as a scaffold protein required for the stability of carbonyl reductase type-4 (CBR4, beta-subunit of the KAR complex) and for its 3-ketoacyl- ACP reductase activity, thereby participating in mitochondrial fatty acid biosynthesis. Catalyzes the NAD-dependent conversion of (3R)-3- hydroxyacyl-CoA into 3-ketoacyl-CoA (3-oxoacyl-CoA) with no chain length preference; this enzymatic activity is not needed for the KAR function (PubMed:<a href="http://www.uniprot.org/citations/19571038" target="_blank">19571038</a>, PubMed:<a href="http://www.uniprot.org/citations/25203508" target="_blank">25203508</a>, PubMed:<a href="http://www.uniprot.org/citations/30508570" target="_blank">30508570</a>). Prefers (3R)-3-hydroxyacyl-CoA over (3S)-3-hydroxyacyl-CoA

and displays enzymatic activity only in the presence of NAD(+) (PubMed:<a href="http://www.uniprot.org/citations/19571038" target="_blank">19571038</a>). Cooperates with enoyl-CoA hydratase 1 in mitochondria, together they constitute an alternative route to the auxiliary enzyme pathways for the breakdown of Z-PUFA (cis polyunsaturated fatty acid) enoyl-esters (Probable) (PubMed:<a href="http://www.uniprot.org/citations/30508570" target="_blank">30508570</a>). NAD-dependent 17-beta-hydroxysteroid dehydrogenase with highest activity towards estradiol (17beta-estradiol or E2). Has very low activity towards testosterone and dihydrotestosterone (17beta-hydroxy-5alpha-androstan-3-one). Primarily an oxidative enzyme, it can switch to a reductive mode determined in the appropriate physiologic milieu and catalyze the reduction of estrone (E1) to form biologically active 17beta-estradiol (PubMed:<a href="http://www.uniprot.org/citations/17978863" target="_blank">17978863</a>).

**Cellular Location**
Mitochondrion matrix

**Tissue Location**
Widely expressed, particularly abundant in prostate, placenta and kidney (PubMed:17978863). Expressed at protein level in various tissues like brain, cerebellum, heart, lung, kidney, ovary, testis, adrenals and prostate (PubMed:30508570)

## HSD17B8 Blocking Peptide (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

## HSD17B8 Blocking Peptide (N-term) - Images

## HSD17B8 Blocking Peptide (N-term) - Background

NAD-dependent 17-beta-hydroxysteroid dehydrogenase with highest activity towards estradiol. Has very low activity towards testosterone. The heteroteramer with CBR4 has NADH-dependent 3-ketoacyl-acyl carrier protein reductase activity. May play a role in biosynthesis of fatty acids in mitochondria.

## HSD17B8 Blocking Peptide (N-term) - References

Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Mungall A.J.,et al.Nature 425:805-811(2003).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Ando A.,et al.Genomics 35:600-602(1996).
Ohno S.,et al.Mol. Cell. Biochem. 309:209-215(2008).