SIGMA-ALDRICH®

sigma-aldrich.com

3050 Spruce Street, St. Louis, MO 63103 USA Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757 email: techservice@sial.com sigma-aldrich.com

Product Information

HSD17B10, GST-tagged, human recombinant, expressed in *Sf*9 insect cells

Catalog Number **SRP5187** Storage Temperature –70 °C

Synonyms: ABAD, ERAB, HCD2, MHBD, HADH2, SCHAD, 17b-HSD10

Product Description

HSD17B10 gene encodes the protein 17β -hydroxysteroid dehydrogenase 10 that is a member of the short-chain dehydrogenase/reductase superfamily SCHAD.¹ HSD17B10 gene product is a mitochondrial protein that is involved in lipid metabolism, fatty acid oxidation, and steroid hormone metabolism. HSD17B10 protein has been implicated in the development of Alzheimer's disease and mutations in the gene are the cause of 2-methyl-3-hydroxybutyryl-CoA dehydrogenase deficiency (MHBD). Furthermore, HSD17B10 may act as a direct molecular link between β -amyloid and mitochondrial toxicity.²

Recombinant, full-length, human HSD17B10 was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST tag. The gene accession number is NM_004493. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.2 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~51 kDa

Purity: 70–95 % (SDS-PAGE, see Figure 1)

Precautions and Disclaimer

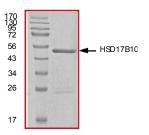
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70 °C is recommended. After opening, aliquot into smaller quantities and store at -70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.

SDS-PAGE Gel of Typical Lot 70-95% (densitometry)



References

- Yang, S.-Y. et al., Multiple functions of type 10 17beta-hydroxysteroid dehydrogenase. Trends Endocr. Metab., 16, 167-175 (2005).
- Lustbader, J. W. et al., ABAD directly links A-beta to mitochondrial toxicity in Alzheimer's disease. Science, **304**, 448-452, (2004).

DKF,MAM 10/11-1

©2011 Sigma-Aldrich Co. LLC. All rights reserved. SIGMA-ALDRICH is a trademark of Sigma-Aldrich Co. LLC, registered in the US and other countries. Sigma brand products are sold through Sigma-Aldrich, Inc. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see product information on the Sigma-Aldrich website at www.sigmaaldrich.com and/or on the reverse side of the invoice or packing slip.