

## Product Information

### HSD17B10, GST-tagged, human recombinant, expressed in Sf9 insect cells

Catalog Number **SRP5187**  
Storage Temperature  $-70^{\circ}\text{C}$

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

#### Product Description

HSD17B10 gene encodes the protein 17 $\beta$ -hydroxysteroid dehydrogenase 10 that is a member of the short-chain dehydrogenase/reductase superfamily SCHAD.<sup>1</sup> 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  $\beta$ -amyloid and mitochondrial toxicity.<sup>2</sup>

Recombinant, full-length, human HSD17B10 was expressed by baculovirus in Sf9 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)

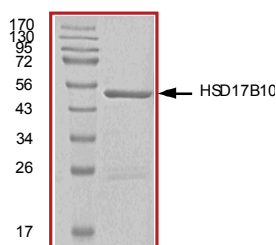
#### Precautions and Disclaimer

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  $-70^{\circ}\text{C}$  is recommended. After opening, aliquot into smaller quantities and store at  $-70^{\circ}\text{C}$ . Avoid repeated handling and multiple freeze/thaw cycles.

**Figure 1.**  
SDS-PAGE Gel of Typical Lot  
70-95% (densitometry)



#### References

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

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