# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-245aa

**UniProt No.** Q9BUT1

NCBI Accession No. NP\_064524

Alternative Names 3-hydroxybutyrate dehydrogenase type 2, DHRS6, EFA6R, FLJ13261, PRO20933, SDR15C1, uCPA-OR, uNQ6308

# **PRODUCT SPECIFICATION**

Molecular Weight 28.8 kDa (265aa) confirmed by MALDI-TOF

**Concentration** 1mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol 0.1M NaCl

**Purity** > 95% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

#### Description

BDH2, also known as DHRS6, belongs to the short-chain dehydrogenases/reductases (SDR) family. This protein may play an important role in the peripheral utilization of 3-hydroxybutyrate. The cytoplasmic localization with its high ratio of oxidized NAD+, the NAD+ dependence and the kinetic parameters of BDH2 make it suitable to convert high levels of circulating 3-hydroxybutyrate into acetoacetate. Recombinant human BDH2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.



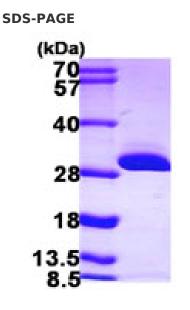
#### **Amino acid Sequence**

MGSSHHHHHH SSGLVPRGSH MGRLDGKVII LTAAAQGIGQ AAALAFAREG AKVIATDINE SKLQELEKYP GIQTRVLDVT KKKQIDQFAN EVERLDVLFN VAGFVHHGTV LDCEEKDWDF SMNLNVRSMY LMIKAFLPKM LAQKSGNIIN MSSVASSVKG VVNRCVYSTT KAAVIGLTKS VAADFIQQGI RCNCVCPGTV DTPSLQERIQ ARGNPEEARN DFLKRQKTGR FATAEEIAML CVYLASDESA YVTGNPVIID GGWSL

### **General References**

Guo K., et al. (2006). J. Biol. Chem., 281: 10291-10297 Ito K., et al. (2006). J. Mol. Biol., 355: 722-733.

## DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)