

# Product information

**SORD, 1-357 aa**

**Human, His-tagged, Recombinant, *E.coli***

**Cat. No. IBATGP0574**

**Full name:** Sorbitol dehydrogenase

**NCBI Accession No.:** AAH25295

**Description:** SORD, also known as L-iditol 2-dehydrogenase or SORD1, is a 357 amino acid member of the zinc-containing alcohol dehydrogenase family. It is widely expressed with highest expression in kidney and in the lens of the eye. SORD enzymatically catalyzes the zinc-dependent interconversion of polyols, such as sorbitol and xylitol, to their respective ketoses. Recombinant human SORD protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

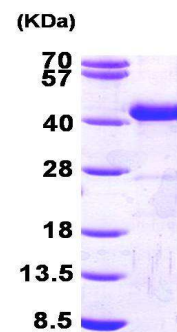
**Form:** Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 0.2M NaCl, 5mM DTT, 20% glycerol

**Molecular Weight:** 40.4 kDa (377aa) confirmed by MALDI-TOF

**Purity:** > 90% by SDS - PAGE

**Concentration:** 0.5 mg/ml (determined by Bradford assay)

**Biological activity:** Specific activity is > 1,200 pmol/min/ug, and is defined as the amount of enzyme that catalyze D-fructose to D-sorbitol per minute at pH 7.5 at 37C.



15% SDS-PAGE (3ug)

**Sequences of amino acids:**

MGSSHHHHHH SSSLVPRGSH MAAAAPNNL SLVVHGPDL RLENYPIPEP GPNEVLLRMH SVGICGSDVH YWEYGRIGNF IVKKPMLVGH  
 EASGTVEKVG SSVKHLKPGD RVAIEPGAPR ENDEFCKMGR YNLSPSIFFC ATPDDGNLC RFYKHNA AFC YKLPDNTVFE EGALIEPLSV  
 GIHACRRGGV TLGHKVLVCG AGPIGMVTL VAKAMGAAQV VVDLSATRL SKAKEIGADL VLQISKESPQ EIARKVEGQL GCKPEVTIEC  
 TGAEASIQAG IYATRSGGTL VLVGLGSEMT TVPLLHAAIR EVDIKGVFRY CNTWPVAISM LASKSVNVKP LVTHRFPLEK ALEAFETFKK  
 GLGLKIMLKCDPSDQNP

**General references:**

Baker MA., *et al.* (2010) *Proteomics*. 10(3):482-95.

Sorger D., *et al.* (2009) *Nucl Med Biol*. 36(1):17-27.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**