

## 32-6913: SORD Human

**Application :** Functional Assay  
EC 1.1.1.14, SORD1, SORD, L-iditol 2-dehydrogenase, DHSO, Sorbitol Dehydrogenase, SDH, (R,R)-  
**Alternative Name :** butanediol dehydrogenase, L-iditol 2-dehydrogenase, Polyol dehydrogenase, Ribitol dehydrogenase, RDH, Xylitol dehydrogenase, XDH

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

SORD, also referred to as sorbitol dehydrogenase, belongs to the zinc-containing alcohol dehydrogenase family. It is widely produced. The lens of the eye and the kidney are the protein highest production areas. Zinc-dependent interconversion of polyols, like sorbitol and xylitol, are enzymatically catalysed to their respective ketoses by SORD.

SORD Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 357 amino acids (1-357a.a.) and having a molecular mass of 38.3kDa. SORD is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg  
**Purification :** Greater than 90.0% as determined by SDS-PAGE.  
**Content :** The SORD solution (0.5mg/ml) contains 10% glycerol, 20mM Tris-HCl buffer (pH 8.5) and 1mM DTT.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.  
**Amino Acid :** MAAAAPNNL SLVVHGPDL RLENYPIPEP GPNEVLLRMH SVGICGSDVH YWEYGRIGNF  
IVKKPMVLGH EASGTVEKVG SSVKHLKPGD RVAIEPGAPR ENDEFCKMGR YNLSPSIFFC  
ATPPDDGNLC RFYKHNA AFC YKLPDNTFE EGALIEPLSV GIHACRRGGV TLGHKVLVCG  
AGPIGMVTLL VAKAMGAAQV VVTDLSATRL SKAKEIGADL VLQISKESPQ EIARKVEGQL  
GCKPEVTIEC TGAEASIQAG IYATRS GGTL VLVGLGSEMT TVPLLHAAIR EVDIKGVFRY  
CNTWPVAISM LASKSVNVKP LVTHRFPLEK ALEAFETFKK GLGLKIMLKC DPSDQNP

### Application Note

Specific activity > 15unit/mg. Defined by the amount of enzyme that catalyze the reduction 1.0 umole of D-fructose to D-sorbitol per minute at pH 7.5 at 37°C.