

## Product datasheet for AR52020PU-N

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## **SORD (1-357) Human Protein**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** SORD (1-357) human protein, 50 μg

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

MAAAAKPNNL SLVVHGPGDL RLENYPIPEP GPNEVLLRMH SVGICGSDVH YWEYGRIGNF IVKKPMVLGH EASGTVEKVG SSVKHLKPGD RVAIEPGAPR ENDEFCKMGR YNLSPSIFFC

ATPPDDGNLC RFYKHNAAFC YKLPDNVTFE EGALIEPLSV GIHACRRGGV TLGHKVLVCG

AGPIGMVTLL VAKAMGAAQV VVTDLSATRL SKAKEIGADL VLQISKESPQ EIARKVEGQL GCKPEVTIEC TGAEASIQAG IYATRSGGTL VLVGLGSEMT TVPLLHAAIR EVDIKGVFRY CNTWPVAISM LASKSVNVKP

LVTHRFPLEK ALEAFETFKK GLGLKIMLKC DPSDQNP

Predicted MW: 38.3 kDa

Concentration: lot specific

Purity: >90% by SDS - PAGE

**Buffer:** Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.5) containing 10% glycerol, 1 mM DTT

**Bioactivity:** Specific: Specific activity is > 15 units/mg, and is defined as the amount of enzyme that

catalyze the reduction 1.0 umole of D-fructose to D-sorbitol per minute at pH 7.5 at 37C.

**Preparation:** Liquid purified protein

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**RefSeq:** NP 003095

 Locus ID:
 6652

 UniProt ID:
 Q00796

 Cytogenetics:
 15q21.1

Synonyms: HEL-S-95n; RDH; SDH; SORD1; SORDD; XDH





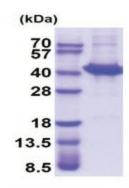
**Summary:** 

Sorbitol dehydrogenase (SORD; EC 1.1.1.14) catalyzes the interconversion of polyols and their corresponding ketoses, and together with aldose reductase (ALDR1; MIM 103880), makes up the sorbitol pathway that is believed to play an important role in the development of diabetic complications (summarized by Carr and Markham, 1995 [PubMed 8535074]). The first reaction of the pathway (also called the polyol pathway) is the reduction of glucose to sorbitol by ALDR1 with NADPH as the cofactor. SORD then oxidizes the sorbitol to fructose using NAD(+) cofactor.[supplied by OMIM, Jul 2010]

**Protein Families:** Druggable Genome

**Protein Pathways:** Fructose and mannose metabolism, Metabolic pathways

## **Product images:**



15% SDS-PAGE (3ug)