

## Product datasheet for **AR09511PU-L**

### SORD (1-357, His-tag) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	SORD (1-357, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH</u> MAAAAPNNL SLVWHGPGDL RLENYPIPEP GPNEVLLRMH SVGICGSDVH YWEYGRIGNF IVKKPMVLGH EASGTVEKVG SSVKHLKPGD RVAIEPGAPR ENDEFCKMGR YNLSPSIFFC ATPDDGNLC RFYKHNA AFC YKLPDNTVFE EGALIEPLSV GIHACRRGGV TLGHKVLVCG AGPIGMVTL VAKAMGAAQV VVTDLSATRL SKAKEIGADL VLQISKESPQ EIARKVEGQL GCKPEVTIEC TGAEASIQAG IYATRSGGTL VLVGLGSEMT TVPLLHAAIR EVDIKGVFRY CNTWPVAISM LASKSVNVKP LVTHRFPLEK ALEAFETFCK GLGLKIMLKC DPSDQNP
Tag:	His-tag
Predicted MW:	40.4 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 8.0) containing 0.2 M NaCl, 5 mM DTT, 20% glycerol
Bioactivity:	Specific: Specific activity is > 20,000 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 37°C.
Preparation:	Liquid purified protein
Protein Description:	Recombinant human SORD protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_003095</u>
Locus ID:	6652
UniProt ID:	<u>Q00796</u>



[View online »](#)

**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:

