

# **Product datasheet for AR09511PU-N**

#### 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

OriGene Technologies, Inc.

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

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** SORD (1-357, His-tag) human recombinant protein, 0.1 mg

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

MGSSHHHHHH SSGLVPRGSH 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

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:** NP 003095

Locus ID: 6652
UniProt ID: Q00796



#### SORD (1-357, His-tag) Human Protein - AR09511PU-N

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

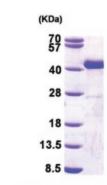
by ALDR1 with NADPH as the cofactor. SORD then oxidizes the sorbitol to fructose using

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)