

Recombinant human SORD protein

Catalog Number: ATGP0574

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-357aa

UniProt No.

Q00796

NCBI Accession No.

AAH25295

Alternative Names

Sorbitol dehydrogenase, Sorbitol dehydrogenase L iditol 2 dehydrogenase, SDH, SORD, SORD 1, SORD1

PRODUCT SPECIFICATION

Molecular Weight

40.4 kDa (377aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 5mM DTT, 20% glycerol

Purity

> 90% by SDS-PAGE

Biological Activity

Specific activity is > 20,000pmol/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.

Tag

His-Tag

Application

Enzyme Activity, SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

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

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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.

Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MAAAAPNNL SLVVHGPGLD RLENYPIPEP GPNEVLLRMH SVGICGSDVH YWEYGRIGNF
IVKKPMVLGH EASGTVEKVG SSVKHLKPGD RVAIEPGAPR ENDEFCKMGR YNLSPSIFFC ATPPDDGNLC RFYKHNA AFC
YKLPDNTFE EGALIEPLSV GIHACRRGGV TLGHKVLVCG AGPIGMVTL VAKAMGAAQV VVTDLSATRL SKAKEIGADL
VLQISKESQP EIARKVEGQL GCKPEVTIEC TGAEASIQAG IYATRSGGTL VLVGLGSEMT TVPLLHAAIR EVDIKGVFRY
CNTWPVAISM LASKSVNVKP LVTHRFPLEK ALEAFETFKK GLGLKIMLKC DPSDQNP

General References

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

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

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)