

**Sorbitol Dehydrogenase Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP58096****Specification**

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**Sorbitol Dehydrogenase Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF
Primary Accession	<a href="#">Q00796</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38325

**Sorbitol Dehydrogenase Polyclonal Antibody - Additional Information****Gene ID** 6652**Other Names**

Sorbitol dehydrogenase, SDH, 1.1.1.-, (R, R)-butanediol dehydrogenase, 1.1.1.4, L-iditol 2-dehydrogenase, 1.1.1.14, Polyol dehydrogenase, Ribitol dehydrogenase, RDH, 1.1.1.56, Xylitol dehydrogenase, XDH, 1.1.1.9, SORD

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**Sorbitol Dehydrogenase Polyclonal Antibody - Protein Information****Name** SORD**Function**

Polyol dehydrogenase that catalyzes the reversible NAD(+)- dependent oxidation of various sugar alcohols. Is mostly active with D- sorbitol (D-glucitol), L-threitol, xylitol and ribitol as substrates, leading to the C2-oxidized products D-fructose, L-erythrulose, D- xylulose, and D-ribulose, respectively (PubMed:<a href="http://www.uniprot.org/citations/3365415" target="\_blank">3365415</a>). Is a key enzyme in the polyol pathway that interconverts glucose and fructose via sorbitol, which constitutes an important alternate route for glucose metabolism. The polyol pathway is believed to be involved in the etiology of diabetic complications, such as diabetic neuropathy and retinopathy, induced by hyperglycemia (PubMed:<a href="http://www.uniprot.org/citations/12962626" target="\_blank">12962626</a>, PubMed:<a href="http://www.uniprot.org/citations/25105142" target="\_blank">25105142</a>, PubMed:<a href="http://www.uniprot.org/citations/29966615" target="\_blank">29966615</a>). May play a role in sperm motility by using sorbitol as an alternative energy source for sperm motility (PubMed:<a href="http://www.uniprot.org/citations/16278369" target="\_blank">16278369</a>). May have a more general function in the metabolism of secondary alcohols since it also catalyzes

the stereospecific oxidation of (2R,3R)-2,3-butanediol. To a lesser extent, can also oxidize L-arabinitol, galactitol and D-mannitol and glycerol in vitro. Oxidizes neither ethanol nor other primary alcohols. Cannot use NADP(+) as the electron acceptor (PubMed:<a href="http://www.uniprot.org/citations/3365415" target="\_blank">3365415</a>).

#### **Cellular Location**

Mitochondrion membrane {ECO:0000250|UniProtKB:Q64442}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q64442}. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:Q64442}. Note=Associated with mitochondria of the midpiece and near the plasma membrane in the principal piece of the flagellum. Also found in the epididymosome, secreted by the epididymal epithelium and that transfers proteins from the epididymal fluid to the sperm surface. {ECO:0000250|UniProtKB:Q64442}

#### **Tissue Location**

Expressed in liver (PubMed:3365415). Expressed in kidney and epithelial cells of both benign and malignant prostate tissue. Expressed in epididymis (at protein level)

### **Sorbitol Dehydrogenase Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Sorbitol Dehydrogenase Polyclonal Antibody - Images**