

ARG82192 Sorbitol Dehydrogenase Activity Assay Kit (Colorimetric)

Package: 100 tests

Store at: -20°C

Summary

Product Description	ARG82192 Sorbitol Dehydrogenase Activity Assay Kit (Colorimetric) can be used to measure Sorbitol Dehydrogenase activity in serum, plasma, urine, tissue and cell culture supernatants.
Tested Reactivity	Hu, Ms, Rat, All
Tested Application	FuncSt
Target Name	Sorbitol Dehydrogenase
Conjugation Note	Read at 565 nm
Sensitivity	0.1 U/L
Detection Range	0.1 - 125 U/L
Sample Type	serum, plasma, urine, tissue and cell culture supernatants
Sample Volume	20 µl
Alternate Names	SORD1; L-iditol 2-dehydrogenase; Sorbitol dehydrogenase; HEL-S-95n; EC 1.1.1.14

Application Instructions

Application Note	Please note that this kit does not include a microplate.
Assay Time	15 min

Properties

Form	Liquid
Storage instruction	Store the kit at -20°C. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

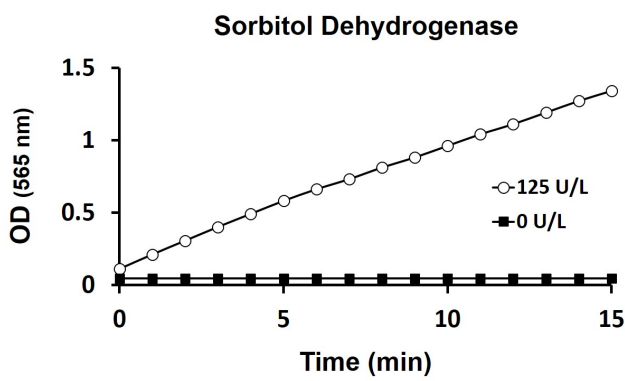
Bioinformation

Gene Symbol	SORD
Gene Full Name	sorbitol dehydrogenase
Background	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]
Function	Converts sorbitol to fructose. Part of the polyol pathway that plays an important role in sperm physiology. May play a role in the sperm motility by providing an energetic source for sperm. [UniProt]

Cellular Localization

Mitochondrion membrane; Peripheral membrane protein. Cell projection, cilium, flagellum.
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. [UniProt]

Images



ARG82192 Sorbitol Dehydrogenase Activity Assay Kit (Colorimetric) enzyme kinetics graph

Kinetics of 0 and 125 U/L Sorbitol Dehydrogenase reaction, using ARG82192 Sorbitol Dehydrogenase Activity Assay Kit (Colorimetric).