

## alcohol dehydrogenase (quinone)

Cat. No. EXWM-0433 Lot. No. (See product label)

Introduction	
Description	Only described in acetic acid bacteria where it is involved in acetic acid production. Associated with membrane. Electron acceptor is membrane ubiquinone. A model structure suggests that, like all other quinoprotein alcohol dehydrogenases, the catalytic subunit has an 8-bladed propeller structure, a calcium ion bound to the PQQ in the active site and an unusual disulfide ring structure in close proximity to the PQQ; the catalytic subunit also has a heme c in the C-terminal domain. The enzyme has two additional subunits, one of which contains three molecules of heme c. It does not require amines for activation. It has a restricted substrate specificity, oxidizing a few primary alcohols (C2 to C6), but not methanol, secondary alcohols and some aldehydes. It is assayed with phenazine methosulfate or with ferricyanide.
Synonyms	type III ADH; membrane associated quinohaemoprotein alcohol dehydrogenase
Product Information	
Form	Liquid or lyophilized powder
EC Number	EC 1.1.5.5
Reaction	ethanol + ubiquinone = acetaldehyde + ubiquinol
Notes	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

## Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C $\sim$ -80 °C.