

ENZYME : EC 1.1.1.4

Abstract

Menu

- . Abstract
- . History
- . Publications
- . Protein Family
- . Protein Sequence

Links



(<https://www.ncbi.nlm.nih.gov/pubmed>)



(<http://prosite.expasy.org/>)



(<http://www.uniprot.org>)



(<http://www.kegg.jp/>)

accepted_name : (R,R)-butanediol dehydrogenase
o_name: (R)-2,3-butanediol dehydrogenase.(R)-diacetyl reductase.1-amino-2-propanol dehydrogenase.1-amino-2-propanol oxidoreductase.2,3-butanediol dehydrogenase.Aminopropanol oxidoreductase.Butylene glycol dehydrogenase.Butyleneglycol dehydrogenase.D-(-)-butanediol dehydrogenase.D-1-amino-2-propanol dehydrogenase.D-1-amino-2-propanol:NAD(2) oxidoreductase.D-aminopropanol dehydrogenase.D-butanediol dehydrogenase.Diacetyl (acetoin) reductase.
synonym: (R)-2,3-butanediol dehydrogenase, (R)-diacetyl reductase, 1-amino-2-propanol dehydrogenase, 1-amino-2-propanol oxidoreductase, 2,3-butanediol dehydrogenase, D-(-)-butanediol dehydrogenase, D-1-amino-2-propanol dehydrogenase, D-1-amino-2-propanol:NAD(2) oxidoreductase, D-aminopropanol dehydrogenase, D-butanediol dehydrogenase, Aminopropanol oxidoreductase, Butylene glycol dehydrogenase, Butyleneglycol dehydrogenase, Diacetyl (acetoin) reductase,

Reaction : (R,R)-butane-2,3-diol + NAD(+) = (R)-acetoin + NADH.

Comments : Also converts diacetyl into acetoin with NADH as reductant.

History

EC 1.1.1.4 created 1961 (EC 1.1.1.74 created 1972, incorporated 1976)

Publications

Title	Authors	First_page	Last_page	volume	year	pubmed
Bacterial butylene glycol dehydrogenase and diacetyl reductase.	Strecker, H.J. and Harary, I.	263	270	211	1975	
Stereoisomeric specificities of 2,3-butanediol dehydrogenase.	Taylor, M.B. and Juni, E.	448	457	39	1977	

Protein Family (PROSITE)

Nothing in the Database

Protein Sequence (SP)

Organism	Chain	Name	Key
BACSU	BDHA	BDHA_BACSU	O34788 (http://www.uniprot.org/uniprot/O34788)
YEAST	BDH1	BDH1_YEAST	P39714 (http://www.uniprot.org/uniprot/P39714)