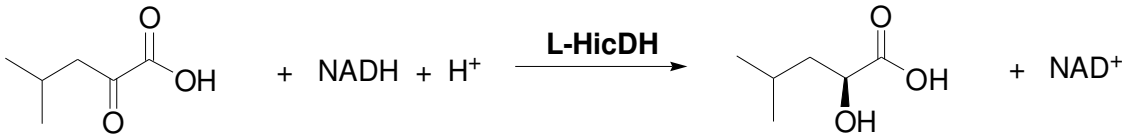
evo-1.1.140

Description: Hydroxyisocaproate Dehydrogenase 140, L-selective, NAD-dependent, bacterial

Catalyzed reaction:



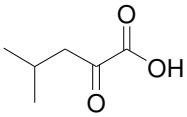
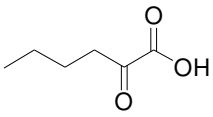
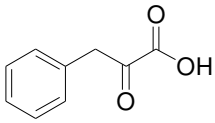
2-Ketoisocaproate L-2-Hydroxyisocaproate

Source: *E. coli*, recombinant

Storage: 4°C

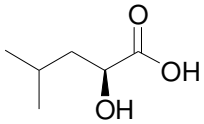
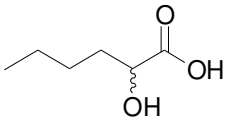
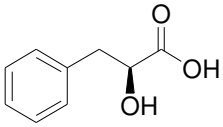
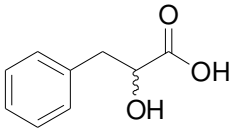
Substrate spectrum: aliphatic and aromatic α-keto acids or rather α-hydroxy acids; examples see below; for further substrates please inquire

Reduction (wild type-enzyme):

Substrate	Structure	Activity [U/mg]	% *ee*
2-Ketoisocaproate		37	> 98 (L)
2-Ketocaproate		40	> 98 (L)
Phenylpyruvate		41	> 98 (L)

Continuation substrate spectrum: **evo-1.1.140** Hydroxyisocaproate Dehydrogenase 140

Oxidation (wild type-enzyme):

Substrate	Structure	Activity [U/mg]
L-2-Hydroxyisocaproate		5
DL-2-Hydroxycaproate		6
L-3-Phenylacetate		1
DL-3-Phenylacetate		1

Properties: pH_{opt}: reduction: 7.0; oxidation: 8.0 – 8.5, T_{opt}: 50°C