

CuZn/Mn (Hydroxylamine) Method (CuZn-SOD/Mn-SOD) Activity

Cat No: HR3BC1115

For research use only

Overview

Detection Method	Colorimetric method
Storage	Reagent 4: -20?, others: 2-8?
Instrument	Spectrophotometer(550 nm)
Assay Time	100 min
Validity	6
Assay Type	Enzyme Activity
Sample Type	Serum,plasma,urine,cells,cell culture supernatant,tissue
Synonyms	CuZn-SOD,T-SOD
Instrument	Spectrophotometer(550 nm)
Detection Principle	Superoxide anion ($O_2^{\cdot-}$) produced by xanthine and xanthine oxidase system can oxidize hydroxylamine to form nitrite which appear purplish red after chromogenic reaction. The SOD in the sample has a specific inhibitory effect on superoxide anion ($O_2^{\cdot-}$), can reduce the content of nitrite. The OD value is lower than control and the activity of SOD is calculated through the formula. There are two kinds of SOD (CuZn-SOD, Mn-SOD) in the cells of higher animals, and the sum of them is equal to the total SOD. The activity of Mn-SOD in the sample will lost after sample pretreatment, but the activity of CuZn-SOD will not.
Reagents	Normal saline (0.9% NaCl)
Labware	Micropipettor, Centrifuge, Incubator, Vortex mixer
Size	100Assays
Sensitivity	2.03 U/mL
Detection Range	2.03-155 U/mL
Recovery Rate	96