

NADP+/NADPH Colorimetric Assay Kit

Cat No: HR3BC1297

For research use only

Overview

Detection Method	Colorimetric method
Storage	-20?
Instrument	Microplate reader (450 nm)
Assay Time	70 min
Validity	6
Assay Type	Quantitative
Sample Type	animal tissu, cells
Synonyms	NADP/NADPH
Instrument	Microplate reader (450 nm)
Detection Principle	Detect total content of NADP+ and NADPH: Glucose 6-phosphate (G6P) is oxidized to 6-phosphate gluconolactone (6-PG) by glucose-6-phosphate dehydrogenase (G6PDH), and NADP+ is reduced to NADPH during this reaction. NADPH, under the action of 1-mPMS, transfer electrons to WST-8 to produce the yellow product, which has a characteristic absorption peak at 450 nm. Therefore, the total content of NADP+ and NADPH can be quantified by measure the OD value at 450 nm. Detect NADPH: After treating sample, heat at 60? water bath for 30 min. the NADP+ of the sample is decomposed and only NADPH remains. NADPH reduces WST-8 to form Formazan, and the amount of NADPH is determined by measure the OD value at 450 nm. Detect NADP+ and NADP+/NADPH: The content of NADP+ and the ratio of NADP+/NADPH in the sample can be obtained according to the total content of NADP+ and NADPH obtained of the first two steps as well as the separate content of NADPH.
Reagents	Ultrapure water
Labware	Test tube, Micropipettor, 37? water bath, 10 KD filters tube.
Size	96T
Sensitivity	0.02 ?mol/L
Detection Range	0.02-5.0 ?mol/L
Recovery Rate	