

Adenosine Content Assay kit

Adenosine (EC 200-389-9) is an endogenous nucleoside that is ubiquitous in human cells. It can directly enter the myocardium and be phosphorylated to generate adenosine, which is involved in myocardial energy metabolism. It is also involved in expanding coronary vessels and increasing blood flow. It can be used to treat supraventricular tachycardia. Adenosine has physiological effects on the cardiovascular system and many other systems and tissues of the body. Adenosine is an important intermediate for the synthesis of adenosine triphosphate (ATP), adenine, adenyate, and vidarabine. Adenosine is hydrolyzed into inosine (also known as 'hypoxanthine nucleoside ') under the action of adenosine deaminase (ADA). Inosine is hydrolyzed under the catalysis of purine nucleoside phosphorylase (PNP) to produce hypoxanthine and ribose phosphate. Hypoxanthine produces hydrogen peroxide under the action of xanthine oxidase (XOD). Hydrogen peroxide produces purplish red substance under the action of peroxidase (POD), 4-aminotepyrine and color source. It has the maximum absorption at the wavelength of 550 nm. Adenosine content can be obtained by detecting the amount of purplish red substance.

Catalog No.	250633
Size	50 Assays / 100 Assays
Product Category	Colorimetric Assay
Detection Method	Spectrophotometry / Micro-Plate Reader
Storage/Stability	-20°C/1 year
Shipping	Gel Packs