



Sodium Content Assay kit

As a key electrolyte in organisms, sodium ion (Na⁺) has multiple effects on maintaining the homeostasis of serum / plasma, animal and plant tissues. In animal systems, serum Na concentration directly regulates plasma osmotic pressure, and its imbalance can lead to cell dehydration or edema. At the same time, Na participates in the regulation of acid-base balance through Na / H exchanger, which affects pH stability. In plants, excessive Na can destroy osmotic regulation, induce ion toxicity, inhibit K absorption, and may damage tissues through oxidative stress. However, some salt-tolerant plants can compartmentalize Na into vacuoles and convert it into osmotic regulators. The substrate p-nitrophenyl-beta-D-galactopyranoside (PNPG) is catalyzed by sodium-activated beta-galactosidase to produce p-nitrophenol. The increase rate of the absorbance of p-nitrophenol at 405 nm per unit time is proportional to the concentration of sodium.

Catalog No.	250278
Size	50 Assays / 100 Assays
Product Category	Colorimetric Assay
Storage/Stability	-20°C/6 months
Shipping	Gel Packs