

Plant Delta1-Pyrroline-5-Carboxylate Synthetase Activity Assay kit

Under different stress conditions such as drought, salinization, heavy metals, ultraviolet rays, etc., it will induce the accumulation of proline in the plant and protect the plant. In higher plants, there are two ways to synthesize proline, with glutamic acid and ornithine as precursors respectively. The glutamate pathway is mainly responsible for stress conditions. The accumulation of proline, and the ornithine pathway mainly works under conditions of sufficient nitrogen, and has nothing to do with the accumulation of proline under stress.

1-pyrroline-5-carboxylic acid synthetase (P5CS) is a key enzyme in the glutamate synthesis pathway of proline. P5CS is a bifunctional enzyme. Under the action of ATP, it can catalyze the phosphorylation of glutamate and the reduction of glutamate gamma-semialdehyde.

Catalog No.	251442
Size	50 Assays / 100 Assays
Product Category	Plant / Soil Assay
Detection Method	UV spectrophotometry
Storage/Stability	-20°C/1 year
Shipping	Gel Packs