

Glutamate Decarboxylase Activity Assay kit

Glutamate decarboxylase (GAD, EC 4.1.1.15) is a highly specific pyridoxal phosphate-dependent amino acid decarboxylase, which is present in animals, plants and microorganisms. GAD is a key enzyme that catalyzes the synthesis of γ -aminobutyric acid (GABA) in vivo. GABA plays an inhibitory neurotransmitter function in the central nervous system of animals, and also plays an auxiliary role in lowering blood pressure, improving brain function, and improving liver and kidney function. GABA in plants mainly plays a role in resisting stress such as low temperature, drought and pests, inducing ethylene synthesis, and regulating growth and development. GAD catalyzes the substrate glutamic acid under the action of coenzyme pyridoxal phosphate to generate GABA and carbon dioxide. GABA reacts with hypochlorite and phenols. The generated blue-green substance has a characteristic absorption peak at 640 nm. By detecting the absorbance at 640 nm, the amount of GABA generated can be calculated, and then the GAD activity of the sample can be calculated.

Catalog No.	250629
Size	50 Assays / 100 Assays
Product Category	Colorimetric Assay
Detection Method	Spectrophotometry / Micro-Plate Reader
Storage/Stability	2-8°C/6 months
Shipping	Gel Packs