Caspase-9 Activity Assay kit

Apoptosis belongs to programmed cell death, which can be found in various organs and cells, and plays a very important role in regulating the homeostasis of cells and organs during normal development, physiology, and pathology. Caspase (Cysteine-requiring Aspartate Protease) is a family of proteases involved in the process of apoptosis, containing more than 10 members. Caspase-9, also known as ICE-laP6 or Mch6, can be activated by forming a complex with cytochrome c and Apaf1, and further activate caspase-3, the most critical enzyme of apoptosis, thereby triggering the apoptosis cascade. Therefore, Caspase-9 is an important upstream caspase in the process of apoptosis signal transduction. Its activation can be regulated by phosphorylation. The assay principle of the kit is based on the specific hydrolysis of its polypeptide substrate Ac-LEHD-pNA (N-acetyl-Leu-Glu-His-Asp-p-nitroanilide) by Caspase-9, releasing free nitroaniline pNA, which is yellow It has a maximum absorption peak at 405 nm and is determined by visible light spectrophotometry. Its absorbance value corresponds to the hydrolytic activity of Caspase-9. The reaction system is 100 microliters, and the reagents provided by the kit can perform determination in addition to the standard curve.

Application: Determination of caspase-9 activity in mammalian tissues and cells.

Catalog No.	520017
Size	20 Assays
Product Category	Cell Detection
Kit Components	1. Lysis buffer 2. Reaction buffer 3. Ac-LEHD-pNA substrate [2mM] 4. pNA standard [10mM]
Storage/Stability	-20°C/6 months
Shipping	Gel Packs