

Caspase-2 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-2, also known as Ich-1 or Nedd-2, is activated during apoptosis signal transduction. The mRNA of Caspase-2 has two different splice variants, the protein translated from the full-length mRNA can promote apoptosis, while the short protein product can inhibit apoptosis. Caspase 2 can be activated by Caspase-1, 3 and granzyme B. The assay principle of the kit is based on the specific hydrolysis of its polypeptide substrate N-acetyl-Val-Asp-Val-Ala-Asp-pNA (Ac-VDVAD-pNA) by Caspase-2, 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-2. The reaction system is 100 microliters, and the reagents provided by the kit can perform sample determination in addition to the standard curve.

Application: Determination of caspase-2 activity in mammalian tissues and cells.

Catalog No.	520011
Size	20 Assays
Product Category	Cell Detection
Kit Components	1. Lysis buffer 2. Reaction buffer 3. Ac-VDVAD-pNA substrate [2mM] 4. pNA standard [10mM]
Storage/Stability	-20°C/6 months
Shipping	Gel Packs