

## Caspase-1 Activity Assay kit

Apoptosis belongs to programmed cell death, which can be found in various organs and cells. It 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. Among them, Caspase-1 is the only caspase that can cleave IL-1b and IL-18 precursors to produce active cytokines. Caspase-1 regulates apoptosis by cleaving Bcl-XL, and regulates related cytokine-mediated immune inflammatory responses by cleaving cytokine precursors. The assay principle of this kit is based on the specific hydrolysis of its polypeptide substrate N-acetyl-Tyr-Val-Ala-Asp-pNA (Ac-YVAD-pNA) by Caspase-1 to release free nitroaniline pNA, which is yellow at 405 nm has the maximum absorption peak, which is determined by the visible light spectrophotometric colorimetric method. Its absorbance value corresponds to the hydrolytic activity of Caspase-1. 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-1 activity in mammalian tissues and cells.

Catalog No.	520010
Size	20 Assays
Product Category	Cell Detection
Kit Components	1. Lysis buffer 2. Reaction buffer 3. Ac-YVAD-pNA substrate [2mM] 4. pNA standard [10mM]
Storage/Stability	-20°C/6 months
Shipping	Gel Packs