

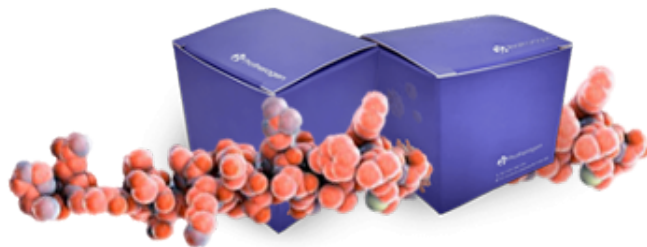
Human caspase 1 (CASP1) ELISA kit

Cat. No.:	OB0625WXX-268
Assay Type:	Quantitative sandwich ELISA
Target Species:	Human
Assay Target:	CASP1
Size:	48T; 96T

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	Human caspase 1 (CASP1) ELISA kit is an ELISA-based <i>in vitro</i> research tool designed specifically for the quantitative detection of CASP1 in human with a range of 0.312-20 ng/mL and a specificity of 0.109 ng/mL.
Assay Principle	The microtiter plates in this kit are pre-coated with an antibody specific to CASP1. Standards or samples are then added to the appropriate microtiter plate wells along with a biotin-conjugated antibody preparation specific to CASP1. Avidin conjugated to horseradish peroxidase (HRP) is then added to each microtiter plate well and incubated. Upon addition of TMB substrate solution, only wells containing CASP1, biotin-conjugated antibody, and enzyme-conjugated avidin will show a color change. The enzyme-substrate reaction is terminated by the addition of sulfuric acid solution, and the color change is measured spectrophotometrically at 450 nm $\pm$ 10 nm. The OD of the sample is then compared to a standard curve to determine the concentration of CASP1 in the sample.
Background	CASP1 can cleave IL-1 β , releasing mature cytokines that are involved in various inflammatory processes. It is highly expressed in the spleen and lungs and plays an important role in pathogen defense.
Synonyms	ICE; IL1BC; IL1-BC; P45; Interleukin 1 beta converting enzyme; Apoptosis-related cysteine peptidase; Interleukin-1 beta convertase
Formula Weight	10,417 Da

**Applications**

Human caspase 1 (CASP1) ELISA kit is used to quantify CASP1 in tissue homogenates, cell lysates, cell culture supernates, and other biological fluid samples of human, providing data to support a wide range of studies.

Research Area

Inflammation; Obesity research

Specification

Sample Type	Tissue homogenates; Cell lysates; Cell culture supernates; Other biological fluids
Detection Range	0.312-20 ng/mL
Sensitivity	0.109 ng/mL
Precision (Intra-assay)	CV<10%
Precision (Inter-assay)	CV<12%
Cross-reactivity	No significant cross-reactivity or interference was observed.
Storage	Store at 4°C (TMB substrate, wash buffer, stop solution) and -20°C (other reagents).