

## Caspase-1 from Human, Recombinant

Cat. No. NATE-0813

Lot. No. (See product label)

### Introduction

#### Description

Caspase 1/Interleukin-1 converting enzyme is an enzyme that proteolytically cleaves other proteins, such as the precursor forms of the inflammatory cytokines interleukin 1 $\beta$  and interleukin 18, into active mature peptides. Caspase 1 has been shown to induce cell necrosis or pyroptosis and may function in various developmental stages. Studies of a similar protein in mouse suggest a role in the pathogenesis of Huntington's disease. Alternative splicing of the gene results in five transcript variants encoding distinct isoforms. Recent studies implicated caspase 1 in promoting CD4 T-cell death and inflammation by HIV, two signature events that fuel HIV disease progression to AIDS.

#### Synonyms

CASP1; ICE; IL1BC; P45; Caspase 1; Interleukin-1; IL-1 $\beta$  Converting Enzyme

### Product Information

#### Species

Human

#### Source

E. coli

#### Form

Liquid

#### Molecular Weight

10 kDa and 20 kDa

#### Purity

>90% by SDS-PAGE

#### Activity

>25,000 units/mg protein

#### Buffer

In 100 mM NaCl, 50 mM HEPES, 10 mM DTT, 1 mM EDTA, 10% glycerol, 0.5% CHAPS, pH 7.4.

#### Unit Definition

One unit is defined as the amount of enzyme that will cleave 1.0 pmol Ac-YVAD-NA per min at 30°C, pH 7.4.

### Storage and Shipping Information

#### Storage

< -70°C; Avoid freeze/thaw