**BACKGROUND**
Caspase-1, originally designated ICE (for IL-1 converting enzyme), is a member of the group of caspases with large prodomains. Caspase-1 promotes maturation of interleukin IL-1β and interleukin18 (IL-18) by proteolytic cleavage of precursor forms into biologically active pro-inflammatory cytokines. The pro-domain of caspase-1 (also known as Pro-C1) represents the amino acid terminal portion of the caspase-1 precursor. Pro-C1 is produced as a residual component after proteolytic cleavage of the precursor generating the functional caspase-1 subunits known as the p20 and p10 subunits. Active caspase-1, a (p20/p10)2 tetramer, is necessary and sufficient for cleavage of precursor IL-1β as well as for induction of apoptosis in some cell lines. The highly conserved family of caspases mediate many of the morphological and biochemical features of apoptosis, including structural dismantling of cell bodies and nuclei, fragmentation of genomic DNA, destruction of regulatory proteins and propagation of other pro-apoptotic molecules. The human caspase-1 gene maps to chromosome 11q22.3 and encodes a cytoplasmic protein expressed in liver, heart, skeletal muscle kidney and testis. Caspase-1 has been implicated in inflammation, septic shock, and other situations such as wound healing and the growth of certain leukemias.

**CHROMOSOMAL LOCATION**
Genetic locus: CASP1 (human) mapping to 11q22.3.

**SOURCE**
caspase-1 p20 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of caspase-1 p20 of human origin.

**PRODUCT**
Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
Blocking peptide available for competition studies, sc-1780 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**
caspase-1 p20 (C-15) is recommended for detection of p20 subunit and precursor of caspase-1 of human and *Xenopus laevis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1,000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); partially cross-reactive with caspase-4, 5, 11, 12 and 13.

caspase-1 p20 (C-15) is also recommended for detection of p20 subunit and precursor of caspase-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for caspase-1 p20 siRNA (h): sc-29922, caspase-1 p20 shRNA Plasmid (h): sc-29922-SH and caspase-1 p20 shRNA (h) Lentiviral Particles: sc-29922-V.

Molecular Weight of caspase-1 p20 isoforms: 45/20 kDa.

**STORAGE**
Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**
caspase-1 p20 (C-15): sc-1780. Western blot analysis of caspase-1 precursor expression in IL-2-induced Jurkat (A) and Jurkat (B) whole cell lysates.

caspase-1 p20 (C-15): sc-1780. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

**SELECT PRODUCT CITATIONS**

**RESEARCH USE**
For research use only, not for use in diagnostic procedures.

**MONOS Satisfaction Guaranteed**
Try caspase-1 (D-3): sc-392736 or caspase-1 (14F468): sc-56036, our highly recommended monoclonal alternatives to caspase-1 p20 (C-15). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see caspase-1 (D-3): sc-392736.