**BACKGROUND**

Initiator caspases, which include caspase-8, activate effector caspases by cleaving inactive forms of effector caspases. In the activation cascade responsible for apoptosis induced by TNFRSF1A and mediated by TNFRSF6/FAS, caspase-8 is the most upstream protease. Caspase-8 binds to adaptor molecule FADD, forming an aggregate referred to as death-inducing signaling complex (DISC), which activates caspase-8. The activated protein is released from the complex and further activates downstream apoptotic proteases. Caspase-8, which is a heterodimer consisting of two subunits (p18 and p10), is widely expressed, but is detected at highest levels in peripheral blood leukocytes (PBLs), thymus, liver and spleen. Defects in CASP8, the gene encoding for caspase-8, may cause CASP8D (caspase-8 deficiency disorder), which is characterized by splenomegaly and CD95-induced apoptosis of PBLs, may lead to immunodeficiency due to defects in T lymphocyte, NK cell and B lymphocyte activation.

**CHROMOSOMAL LOCATION**

Genetic locus: CASP8 (human) mapping to 2q33.1.

**SOURCE**

caspase-8 p18 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of caspase-8 p18 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-6136 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

caspase-8 p18 (C-20) is recommended for detection of p18 subunit and precursor of caspase-8 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

caspase-8 p18 (C-20) is also recommended for detection of p18 subunit and precursor of caspase-8 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for caspase-8 siRNA (h): sc-29930, caspase-8 shRNA Plasmid (h): sc-29930-SH and caspase-8 shRNA (h) Lentiviral Particles: sc-29930-V.

Molecular Weight of caspase-8 precursor: 55 kDa.
Molecular Weight of caspase-8 p18 subunit: 18 kDa.
Molecular Weight of caspase-8 p10 subunit: 10 kDa.

**STORAGE**

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

**DATA**

- **Western blot analysis**: caspase-8 p18 expression in lane A and 1-β-D-Arabinofuranosylcytosine (sc-201628) treated (B). Jurkat whole cell lysates. Note cleavage of caspase-8 p18 expression in lane B.
- **Immunoperoxidase**: caspase-8 p20 (C-20): sc-6136. Immunoperoxidase staining of normal, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.