**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; Casp8 (mouse) mapping to 1C1.3.

**SOURCE**

caspase-8 p18 (D-8) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 217-350 mapping within the p18 subunit of caspase-8 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

caspase-8 p18 (D-8) is recommended for detection of p18 subunit and precursor of caspase-8 of mouse, rat and 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).


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.

Positive Controls: caspase-8 (h): 293T Lysate: sc-114794.

**RESEARCH USE**

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

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


See caspase-8 (8CSP03): sc-56070 for caspase-8 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.