caspase-8 p18 (D-8): sc-5263

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 1 C1.3.

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 kappa light chain in 1.0 ml of PBS with<br/>< 0.1% sodium azide and 0.1% gelatin.
caspase-8 p18 (D-8) is available conjugated to either Alexa Fluor® 546<br/>(sc-5263 AF546) or Alexa Fluor® 594 (sc-5263 AF594), 200 µg/ml, for WB<br/>(RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-5263 AF680)<br/>or Alexa Fluor® 790 (sc-5263 AF790), 200 µg/ml, for Near-Infrared (NIR)<br/>WB, IF and FCM.

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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 1:100-1:10000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:5000), 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).

Suitable for use as control antibody for caspase-8 siRNA (h): sc-29930, caspase-8 siRNA (m): sc-37226, caspase-8 shRNA Plasmid (h): sc-29930-SH, caspase-8 shRNA Plasmid (m): sc-37226-SH, caspase-8 shRNA (h) Lentiviral Particles: sc-29930-V and caspase-8 shRNA (m) Lentiviral Particles: sc-37226-V.

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

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

DATA

SELECT PRODUCT CITATIONS

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