

FAAP100 (C-11): sc-393052

BACKGROUND

FAAP100 (Fanconi anemia-associated protein of 100 kDa), also known as C17orf70, is an 881 amino acid protein that belongs to the multisubunit Fanconi anemia (FA) core complex in conjunction with FANCA, FANCB, FANCC, FANCE, FANCF, FANCG, FANCL/PHF9, FANCM and FAAP24. This complex functions in Fanconi anemia-associated DNA damage response, with FAAP100 playing a major role in core complex stability and FANCD2 monoubiquitination. FAAP100 localizes to the nucleus and forms a complex with FANCB and FANCL. When repressed, FAAP100 induces chromosomal instability and hypersensitivity to DNA cross-linking agents. Existing as three alternatively spliced isoforms, the gene encoding FAAP100 maps to human chromosome 17q25.3.

REFERENCES

1. Meetei, A.R., et al. 2003. A multiprotein nuclear complex connects Fanconi anemia and Bloom syndrome. *Mol. Cell. Biol.* 23: 3417-3426.
2. Zody, M.C., et al. 2006. DNA sequence of human chromosome 17 and analysis of rearrangement in the human lineage. *Nature* 440: 1045-1049.
3. Ling, C., et al. 2007. FAAP100 is essential for activation of the Fanconi anemia-associated DNA damage response pathway. *EMBO J.* 26: 2104-2114.
4. Ali, A.M., et al. 2009. Identification and characterization of mutations in FANCL gene: a second case of Fanconi anemia belonging to FA-L complementation group. *Hum. Mutat.* 30: E761-E770.
5. Ali, A.M., et al. 2009. FANCM-FAAP24 and FANCL: FA proteins that metabolize DNA. *Mutat. Res.* 668: 20-26.

CHROMOSOMAL LOCATION

Genetic locus: Faap100 (mouse) mapping to 11 E2.

SOURCE

FAAP100 (C-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 313-342 within an internal region of FAAP100 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAAP100 (C-11) is available conjugated to agarose (sc-393052 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393052 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393052 PE), fluorescein (sc-393052 FITC), Alexa Fluor® 488 (sc-393052 AF488), Alexa Fluor® 546 (sc-393052 AF546), Alexa Fluor® 594 (sc-393052 AF594) or Alexa Fluor® 647 (sc-393052 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393052 AF680) or Alexa Fluor® 790 (sc-393052 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393052 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

FAAP100 (C-11) is recommended for detection of FAAP100 of mouse and rat origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FAAP100 siRNA (m): sc-145001, FAAP100 shRNA Plasmid (m): sc-145001-SH and FAAP100 shRNA (m) Lentiviral Particles: sc-145001-V.

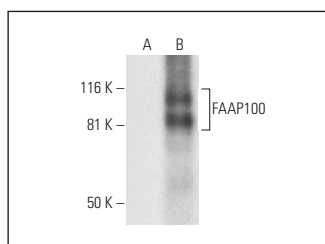
Molecular Weight of FAAP100: 100 kDa.

Positive Controls: FAAP100 (m2): 293T Lysate: sc-125321.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FAAP100 (C-11): sc-393052. Western blot analysis of FAAP100 expression in non-transfected: sc-117752 (A) and mouse FAAP100 transfected: sc-125321 (B) 293T whole cell lysates.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.