

# FAAP100 (K-17): sc-242647

## 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

- Meetej, A.R., et al. 2003. A multiprotein nuclear complex connects Fanconi anemia and Bloom syndrome. *Mol. Cell. Biol.* 23: 3417-3426.
- Zody, M.C., et al. 2006. DNA sequence of human chromosome 17 and analysis of rearrangement in the human lineage. *Nature* 440: 1045-1049.
- Ling, C., et al. 2007. FAAP100 is essential for activation of the Fanconi anemia-associated DNA damage response pathway. *EMBO J.* 26: 2104-2114.
- 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.
- Ali, A.M., et al. 2009. FANCM-FAAP24 and FANCL: FA proteins that metabolize DNA. *Mutat. Res.* 668: 20-26.
- Thompson, L.H., et al. 2009. Cellular and molecular consequences of defective Fanconi anemia proteins in replication-coupled DNA repair: mechanistic insights. *Mutat. Res.* 668: 54-72.

## CHROMOSOMAL LOCATION

Genetic locus: 2310003H01Rik (mouse) mapping to 11 E2.

## SOURCE

FAAP100 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FAAP100 of mouse 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-242647 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

FAAP100 (K-17) is recommended for detection of FAAP100 of mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with FAAP24.

FAAP100 (K-17) is also recommended for detection of FAAP100 in additional species, including equine.

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.

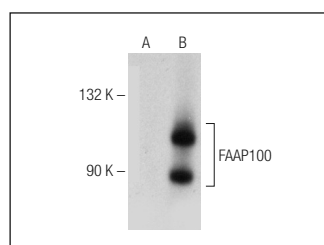
Molecular Weight of FAAP100: 100 kDa.

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

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotting A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



FAAP100 (K-17): sc-242647. Western blot analysis of FAAP100 expression in non-transfected: sc-117752 (A) and mouse FAAP100 transfected: sc-125321 (B) 293T whole cell lysates.

## RESEARCH USE

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