FANK1 (F-5): sc-398026

BACKGROUND

FANK1 [Fibronectin type III and ankyrin repeat domains 1], also known as HSD13, is a 345 amino acid nuclear and cytoplasmic testis-specific protein found primarily in pachytene spermatocytes and round spermatids. Containing six ANK repeats and a single Fibronectin type-III domain, FANK1 undergoes alternative splicing events to form three isoforms. Possessing DNA binding activity, FANK1 is suggested to act as a transcription factor and may regulate gene expression during spermatogenesis. The gene encoding FANK1 maps to human chromosome 10, which contains over 800 genes and 135 million nucleotides, making up nearly 4.5% of the human genome. PTEN is an important tumor suppressor gene located on chromosome 10 and, when defective, causes a genetic predisposition to cancer development known as Cowden syndrome.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: FANK1 (human) mapping to 10q26.2; Fank1 (mouse) mapping to 7 F3.

SOURCE

FANK1 (F-5) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of FANK1 of human origin.

PRODUCT

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FANK1 (F-5) is available conjugated to agarose (sc-398026 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398026 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398026 PE), fluorescein (sc-398026 FITC), Alexa Fluor® 488 (sc-398026 AF488), Alexa Fluor® 546 (sc-398026 AF546), Alexa Fluor® 594 (sc-398026 AF594) or Alexa Fluor® 647 (sc-398026 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398026 AF680) or Alexa Fluor® 790 (sc-398026 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Molecular Weight of FANK1: 38 kDa.

APPLICATIONS

FANK1 (F-5) is recommended for detection of FANK1 of mouse, rat and human 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], 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 FANK1 siRNA (h): sc-90625, FANK1 siRNA (m): sc-145066, FANK1 shRNA Plasmid (h): sc-90625-SH, FANK1 shRNA Plasmid (m): sc-145066-SH, FANK1 shRNA (h) Lentiviral Particles: sc-90625-V and FANK1 shRNA (m) Lentiviral Particles: sc-145066-V.

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680 (sc-398026 AF680), Alexa Fluor® 555 (sc-398026 AF555), Alexa Fluor® 655 (sc-398026 AF655), Alexa Fluor® 750 (sc-398026 AF750), 200 µg/ml, for NIR WB, IHC(P) and ELISA; to either phycoerythrin (sc-398026 PE), fluorescein (sc-398026 FITC), Alexa Fluor® 488 (sc-398026 AF488), Alexa Fluor® 546 (sc-398026 AF546), Alexa Fluor® 594 (sc-398026 AF594) or Alexa Fluor® 647 (sc-398026 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398026 AF680) or Alexa Fluor® 790 (sc-398026 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

FANK1 (F-5): sc-398026 Western blot analysis of FANK1 expression in non-transfected: sc-117752 (A) and mouse FANK1 transfected: sc-126834 (B) 293T whole cell lysates.

FANK1 (F-5): sc-398026. Immunoperoxidase staining of formalin fixed, paraffin embedded human lower stomach tissue showing cytoplasmic staining of glandular cells (A); Immunoperoxidase staining of formalin fixed, paraffin embedded human kidney tissue showing cytoplasmic staining of cells in tubules (B).

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.