# FAM50A (D-5): sc-518197



The Power to Question

# **BACKGROUND**

FAM50A (family with sequence similarity 50, member A), also known as DXS9928E, HXC26, XAP5 or 9F, is a 339 amino acid nuclear protein that belongs to the FAM50 family. Expressed ubiquitously with highest expression in fetal kidney, liver and brain, as well as adult heart, spleen, skeletal muscle, prostate and small intestine, FAM50A is thought to function as a transcription factor that may bind to DNA. FAM50A contains an SV40 large T antigen nuclear localization signal and a polymorphic CCG repeat region in its 5'-UTR. Defects in the gene encoding FAM50A may be associated with acute lymphoblastic leukemia, suggesting a possible role for FAM50A in carcinogenesis.

# **REFERENCES**

- 1. Toyoda, A., et al. 1996. Isolation and analysis of a novel gene, HXC-26, adjacent to the Rab GDP dissociation inhibitor gene located at human chromosome Xq28 region. DNA Res. 3: 337-340.
- Mazzarella, R., et al. 1997. Differential expression of XAP5, a candidate disease gene. Genomics 45: 216-219.
- Sedlacek, Z., et al. 1999. Human and mouse XAP-5 and XAP-5-like (X5L) genes: identification of an ancient functional retroposon differentially expressed in testis. Genomics 61: 125-132.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300453. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

# **CHROMOSOMAL LOCATION**

Genetic locus: FAM50A (human) mapping to Xq28; Fam50a (mouse) mapping to X A7.3.

#### **SOURCE**

FAM50A (D-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 318-339 of FAM50A of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu$ g IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAM50A (D-5) is available conjugated to agarose (sc-518197 AC), 500  $\mu$ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-518197 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518197 PE), fluorescein (sc-518197 FITC), Alexa Fluor\* 488 (sc-518197 AF488), Alexa Fluor\* 546 (sc-518197 AF546), Alexa Fluor\* 594 (sc-518197 AF594) or Alexa Fluor\* 647 (sc-518197 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor\* 680 (sc-518197 AF680) or Alexa Fluor\* 790 (sc-518197 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

#### **STORAGE**

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

# **APPLICATIONS**

FAM50A (D-5) is recommended for detection of FAM50A of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 FAM50A siRNA (h): sc-90950, FAM50A siRNA (m): sc-155372, FAM50A shRNA Plasmid (h): sc-90950-SH, FAM50A shRNA Plasmid (m): sc-155372-SH, FAM50A shRNA (h) Lentiviral Particles: sc-90950-V and FAM50A shRNA (m) Lentiviral Particles: sc-155372-V.

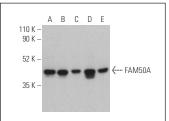
Molecular Weight of FAM50A: 40 kDa.

Positive Controls: HCT-116 whole cell lysate: sc-364175, U-251-MG whole cell lysate: sc-364176 or A549 cell lysate: sc-2413.

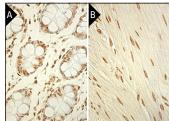
# **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker^M 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-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz $^*$  Mounting Medium: sc-24941 or UltraCruz $^*$  Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-lgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

#### **DATA**



FAM50A (D-5): sc-518197. Western blot analysis of FAM50A expression in NCI-H1299 (A), U-251-MG (B), UJrkat (C), A549 (D) and HCT-116 (E) whole cell Hsata Detection reagent used: m-lgG $_2$ b BP-HRP: sc-542741.



FAM50A (D-5): sc-518197. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing nuclear staining of glandular cells and endothelial cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human smooth muscle tissue showing nuclear staining of smooth muscle cells (B). Blocked with 0.25X UltraCruz® Blocking Reagent: sc-516214. Detected with m-lgG Fc BP-8: sc-533652 and ImmunoCruz® ABC Kit: sc-516216.

# **RESEARCH USE**

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