# FAM167A (G-3): sc-393999



The Power to Question

#### **BACKGROUND**

FAM167A, also known as C8orf13, is a 214 amino acid protein that belongs to the FAM167 (SEC) family. The gene encoding FAM167A maps to human chromosome 8, which consists of nearly 146 million base pairs, encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

## **CHROMOSOMAL LOCATION**

Genetic locus: FAM167A (human) mapping to 8p23.1; Fam167a (mouse) mapping to 14 D1.

#### **SOURCE**

FAM167A (G-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 42-67 within an internal region of FAM167A of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG $_{2a}$  lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAM167A (G-3) is available conjugated to agarose (sc-393999 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393999 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393999 PE), fluorescein (sc-393999 FITC), Alexa Fluor $^{\circ}$  488 (sc-393999 AF488), Alexa Fluor $^{\circ}$  546 (sc-393999 AF546), Alexa Fluor $^{\circ}$  594 (sc-393999 AF594) or Alexa Fluor $^{\circ}$  647 (sc-393999 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor $^{\circ}$  680 (sc-393999 AF680) or Alexa Fluor $^{\circ}$  790 (sc-393999 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393999 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## **APPLICATIONS**

FAM167A (G-3) is recommended for detection of FAM167A 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 FAM167A siRNA (h): sc-77862, FAM167A siRNA (m): sc-141650, FAM167A shRNA Plasmid (h): sc-77862-SH, FAM167A shRNA Plasmid (m): sc-141650-SH, FAM167A shRNA (h) Lentiviral Particles: sc-77862-V and FAM167A shRNA (m) Lentiviral Particles: sc-141650-V.

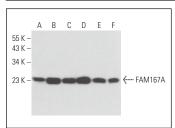
Molecular Weight of FAM167A: 24 kDa.

Positive Controls: Ramos cell lysate: sc-2216, WI-38 whole cell lysate: sc-364260 or SH-SY5Y cell lysate: sc-3812.

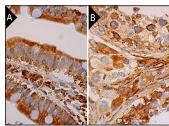
#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgGλ BP-HRP: sc-516132 or m-lgGλ BP-HRP (Cruz Marker): sc-516132-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-lgGλ BP-FITC: sc-516185 or m-lgGλ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-lgGλ BP-HRP: sc-516132 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

#### **DATA**



FAM167A (G-3): sc-393999. Western blot analysis of FAM167A expression in SH-SYSY (A), Daudi (B), Ramos (C), Wl-38 (D), Neuro-2A (E) and C6 (F) whole cell lysates. Detection reagent used: m-lgG\(\text{A}\) BP-HRP (Cruz Marker): sc-516132-CM.



FAM167A (G-3): sc-393999. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts and Leydig cells (B).

#### **SELECT PRODUCT CITATIONS**

1. Yang, T., et al. 2022. FAM167A is a key molecule to induce Bcr-Ablindependent TKI resistance in CML via noncanonical NF $\kappa$ B signaling activation. J. Exp. Clin. Cancer Res. 41: 82.

# 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.

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