

# FAM55A (H-2): sc-514349

## BACKGROUND

With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and  $\beta$  thalassemia are caused by HBB gene mutations. Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11. The FAM55A gene product has been provisionally designated FAM55A pending further characterization.

## REFERENCES

1. Grossfeld, P.D., et al. 2004. The 11q terminal deletion disorder: a prospective study of 110 cases. *Am. J. Med. Genet. A* 129A: 51-61.
2. Loussouarn, G., et al. 2006. KCNQ1 K<sup>+</sup> channel-mediated cardiac channelopathies. *Methods Mol. Biol.* 337: 167-183.
3. Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. *Nature* 440: 497-500.
4. Zehelein, J., et al. 2006. Skipping of Exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. *J. Biol. Chem.* 281: 35397-35403.

## CHROMOSOMAL LOCATION

Genetic locus: NXPE1 (human) mapping to 11q23.2; Fam55a (mouse) mapping to 9 A5.3.

## SOURCE

FAM55A (H-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 409-434 within an internal region of FAM55A of human origin.

## PRODUCT

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

FAM55A (H-2) is available conjugated to agarose (sc-514349 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514349 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514349 PE), fluorescein (sc-514349 FITC), Alexa Fluor<sup>®</sup> 488 (sc-514349 AF488), Alexa Fluor<sup>®</sup> 546 (sc-514349 AF546), Alexa Fluor<sup>®</sup> 594 (sc-514349 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-514349 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-514349 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-514349 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514349 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

FAM55A (H-2) is recommended for detection of FAM55A 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FAM55A siRNA (h): sc-96907, FAM55A siRNA (m): sc-144134, FAM55A shRNA Plasmid (h): sc-96907-SH, FAM55A shRNA Plasmid (m): sc-144134-SH, FAM55A shRNA (h) Lentiviral Particles: sc-96907-V and FAM55A shRNA (m) Lentiviral Particles: sc-144134-V.

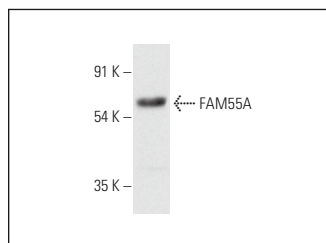
Molecular Weight of FAM55A: 63 kDa.

Positive Controls: A549 cell lysate: sc-2413 or P19 cell lysate: sc-24760.

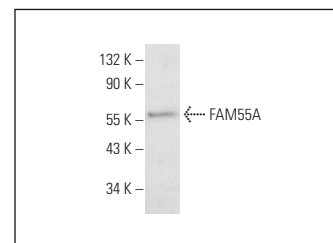
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



FAM55A (H-2): sc-514349. Western blot analysis of FAM55A expression in A549 whole cell lysate.



FAM55A (H-2): sc-514349. Western blot analysis of FAM55A expression in P19 whole cell lysate.

## 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](http://www.scbt.com) for detailed protocols and support products.