

FAM110A (B-11): sc-376464

BACKGROUND

FAM110A (family with sequence similarity 110, member A) is a 295 amino acid protein that localizes to the cytoplasm, the cytoskeleton and the centrosome. Specifically, it colocalizes with microtubules during interphase and at spindle poles in mitosis. Expressed in thyroid, lymph node, trachea, adrenal gland, bone marrow, spleen, thymus, prostate, and peripheral blood leukocyte, FAM110A is thought to interact with CSPP and play a role in proper cell cycle progression. FAM110A expression is increased during S phase and G₂/M phase. The gene encoding FAM110A maps to human chromosome 20, which houses over 60 genes and comprises approximately 2% of the human genome. Chromosome 20 contains a region with numerous genes expressed in the epididymis which are thought important for seminal production and some viewed as potential targets for male contraception.

CHROMOSOMAL LOCATION

Genetic locus: FAM110A (human) mapping to 20p13; Fam110a (mouse) mapping to 2 G3.

SOURCE

FAM110A (B-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 103-139 within an internal region of FAM110A of human origin.

PRODUCT

Each vial contains 200 µg IgG₃ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-376464 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

FAM110A (B-11) is recommended for detection of FAM110A 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 FAM110A siRNA (h): sc-77297, FAM110A siRNA (m): sc-77298, FAM110A shRNA Plasmid (h): sc-77297-SH, FAM110A shRNA Plasmid (m): sc-77298-SH, FAM110A shRNA (h) Lentiviral Particles: sc-77297-V and FAM110A shRNA (m) Lentiviral Particles: sc-77298-V.

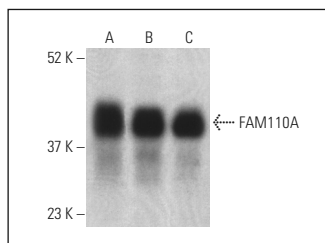
Molecular Weight of FAM110A: 31 kDa.

Positive Controls: Ca Ski whole cell lysate: sc-364360, A-431 whole cell lysate: sc-2201 or PC-3 cell lysate: sc-2220.

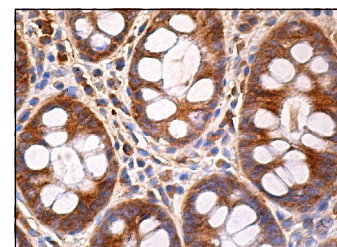
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



FAM110A (B-11): sc-376464. Western blot analysis of FAM110A expression in A-431 (A), Ca Ski (B) and PC-3 (C) whole cell lysates. Detection reagent used: m-IgG₃ BP-HRP: sc-533670.



FAM110A (B-11): sc-376464. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Aquino Perez, C., et al. 2021. CK1-mediated phosphorylation of FAM110A promotes its interaction with mitotic spindle and controls chromosomal alignment. EMBO Rep. 22: e51847.
2. Zhong, H., et al. 2023. Pan-cancer analysis reveals potential of FAM110A as a prognostic and immunological biomarker in human cancer. Front. Immunol. 14: 1058627.

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.