# SANTA CRUZ BIOTECHNOLOGY, INC.

# FAM110A (H-60): sc-366040



## 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  $G_2/M$  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.

# REFERENCES

- 1. Prusiner, S.B. 1998. The prion diseases. Brain Pathol. 8: 499-513.
- Collins, S., McLean, C.A. and Masters, C.L. 2001. Gerstmann-Sträussler-Scheinker syndrome, fatal familial insomnia and kuru: a review of these less common human transmissible spongiform encephalopathies. J. Clin. Neurosci. 8: 387-397.
- Masullo, C. and Macchi, G. 2001. Does PRNP gene control the clinical and pathological phenotype of human spongiform transmissible encephalopathies? Clin. Neuropathol. 20: 19-25.
- Joó, J.G., Beke, A., Tóth-Pál, E., Hargitai, B., Szigeti, Z., Papp, C. and Papp, Z. 2006. Trisomy 20 mosaicism and nonmosaic trisomy 20: a report of 2 cases. J. Reprod. Med. 51: 209-212.
- Ville, D., Kaminska, A., Bahi-Buisson, N., Biraben, A., Plouin, P., Telvi, L., Dulac, O. and Chiron, C. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. Epilepsia 47: 543-549.
- Elghezal, H., Hannachi, H., Mougou, S., Kammoun, H., Triki, C. and Saad, A. 2007. Ring chromosome 20 syndrome without deletions of the subtelomeric and CHRNA4-KCN02 genes loci. Eur. J. Med. Genet. 50: 441-445.
- 7. Kazantsev, A.G. 2007. Cellular pathways leading to neuronal dysfunction and degeneration. Drug News Perspect. 20: 501-509.
- 8. Lundwall, A. 2007. A locus on chromosome 20 encompassing genes that are highly expressed in the epididymis. Asian J. Androl. 9: 540-544.
- O'Rand, M.G., Widgren, E.E., Wang, Z. and Richardson, R.T. 2007. Eppin: an epididymal protease inhibitor and a target for male contraception. Soc. Reprod. Fertil. Suppl. 63: 445-453.

### CHROMOSOMAL LOCATION

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

## SOURCE

FAM110A (H-60) is a rabbit polyclonal antibody raised against amino acids 32-91 mapping near the N-terminus of FAM110A of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **APPLICATIONS**

FAM110A (H-60) is recommended for detection of FAM110A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

FAM110A (H-60) is also recommended for detection of FAM110A in additional species, including equine, canine, bovine and porcine.

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.

### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

### **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 or our catalog for detailed protocols and support products.