SANTA CRUZ BIOTECHNOLOGY, INC.

C11orf24 (E-11): sc-514397

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

C11orf24 (chromosome 11 open reading frame 24), also known as DM4E3, is a 449 amino acid single-pass type I membrane protein that is expressed in brain, lung, skeletal muscle, kidney, spleen, prostate, testis, ovary and small intestine, with highest expression in heart, placenta, liver, pancreas and colon, and low expression in thymus and leukocytes. C11orf24 is encoded by a gene located on human chromosome 11, which consists of 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 β 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.

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^+ 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.
5. Ataga, K.I., et al. 2007. β-thalassaemia and sickle cell anaemia as paradigms of hypercoagulability. Br. J. Haematol. 139: 3-13.

CHROMOSOMAL LOCATION

Genetic locus: C11orf24 (human) mapping to 11q13.2; 1810055G02Rik (mouse) mapping to 19 A.

SOURCE

C11orf24 (E-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 313-331 within an extracellular domain of C11orf24 of human origin.

PRODUCT

Each vial contains 200 µg IgM 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-514397 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

C11orf24 (E-11) is recommended for detection of C11orf24 of human origin, 1810055G02Rik of mouse origin, and the corresponding rat homolog 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 C11orf24 siRNA (h): sc-96502, 1810055G02Rik siRNA (m): sc-108578, C11orf24 shRNA Plasmid (h): sc-96502-SH, 1810055G02Rik shRNA Plasmid (m): sc-108578-SH, C11orf24 shRNA (h) Lentiviral Particles: sc-96502-V and 1810055G02Rik shRNA (m) Lentiviral Particles: sc-108578-V.

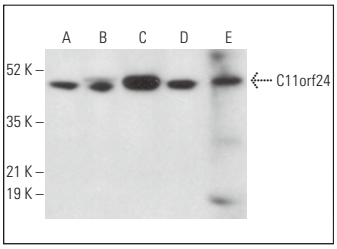
Molecular Weight of C11orf24: 46 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Caco-2 cell lysate: sc-2262 or C3H/10T1/2 cell lysate: sc-3801.

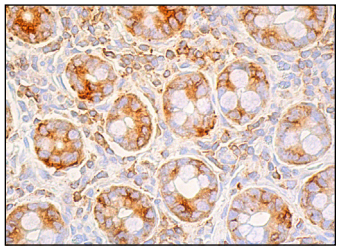
RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (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



C11orf24 (E-11): sc-514397. Western blot analysis of C11orf24 expression in Jurkat (**A**), Caco-2 (**B**), C3H/10T1/2 (**C**) and c4 (**D**) whole cell lysates and human lung tissue extract (**E**).



C11orf24 (E-11): sc-514397. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic and membrane staining of glandular cells. Blocked with 0.25X UltraCruz® Blocking Reagent: sc-516214. Detected with m-IgGκ BP-B: sc-516142 and ImmunoCruz® ABC Kit: sc-516216.

STORAGE

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