

DEF8 (L-18): sc-240301

BACKGROUND

DEF8 (differentially expressed in FDCP 8) is a 512 amino acid protein that is expressed at highest levels in peripheral leukocytes. It is expressed as five isoforms as a result of alternative splicing events. The gene encoding DEF8 maps to chromosome 16, which encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The rare disorder Rubinstein-Taybi syndrome is associated with chromosome 16, as is Crohn's disease, a gastrointestinal inflammatory condition that may involve the NOD2 gene. An association with systemic lupus erythematosus and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

REFERENCES

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2. Hotfilder, M., et al. 1999. Def-2, -3, -6 and -8, novel mouse genes differentially expressed in the haemopoietic system. *Br. J. Haematol.* 106: 335-344.
3. Karlsson, J., et al. 2003. Novel quantitative trait loci controlling development of experimental autoimmune encephalomyelitis and proportion of lymphocyte subpopulations. *J. Immunol.* 170: 1019-1026.
4. Forabosco, P., et al. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. *Genes Immun.* 7: 609-614.
5. Carneiro, L.A., et al. 2007. Nod-like receptors in innate immunity and inflammatory diseases. *Ann. Med.* 39: 581-593.
6. Yang, Y., et al. 2007. Giant axonal neuropathy. *Cell. Mol. Life Sci.* 64: 601-609.
7. King, K., et al. 2007. Identification, evolution, and association study of a novel promoter and first exon of the human NOD2 (CARD15) gene. *Genomics* 90: 493-501.
8. Gervasini, C., et al. 2007. High frequency of mosaic CREBBP deletions in Rubinstein-Taybi syndrome patients and mapping of somatic and germ-line breakpoints. *Genomics* 90: 567-573.

CHROMOSOMAL LOCATION

Genetic locus: DEF8 (human) mapping to 16q24.3; Def8 (mouse) mapping to 8 E1.

SOURCE

DEF8 (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DEF8 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-240301 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DEF8 (L-18) is recommended for detection of DEF8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with DEF6.

DEF8 (L-18) is also recommended for detection of DEF8 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for DEF8 siRNA (h): sc-93185, DEF8 siRNA (m): sc-142955, DEF8 shRNA Plasmid (h): sc-93185-SH, DEF8 shRNA Plasmid (m): sc-142955-SH, DEF8 shRNA (h) Lentiviral Particles: sc-93185-V and DEF8 shRNA (m) Lentiviral Particles: sc-142955-V.

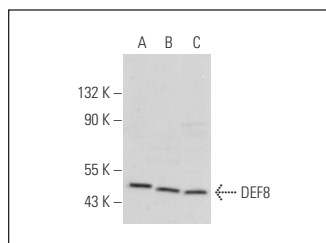
Molecular Weight of DEF8: 59/23/51/45/52 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



DEF8 (L-18): sc-240301. Western blot analysis of DEF8 expression in NIH/3T3 (A), Jurkat (B) and HeLa (C) whole cell lysates.

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.