# DSEL (N-19): sc-85078



The Power to Question

## **BACKGROUND**

DSEL, also known as NCAG1, is a 1,212 amino acid multi-pass membrane protein expressed in various regions of the brain and multiple peripheral tissues. Belonging to the dermatan-sulfate isomerase family, DSEL contains a chondroitin sulfate sulfotransferase domain, which suggests that DSEL may be involved in dermatan sulfate biosynthesis. Dermatan sulfate is believed be involved in iduronic acid-dependent interactions with growth factors, selectins, cytokines and coagulation inhibitors. The gene encoding DSEL is located on human chromosome 18q22.1 and has been linked to bipolar disease. Human chromosome 18 houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

## **REFERENCES**

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- Maccarana, M., Kalamajski, S., Kongsgaard, M., Magnusson, S.P., Oldberg, A. and Malmström, A. 2009. Dermatan sulfate epimerase 1-deficient mice have reduced content and changed distribution of iduronic acids in dermatan sulfate and an altered collagen structure in skin. Mol. Cell. Biol. 29: 5517-5528.

# CHROMOSOMAL LOCATION

Genetic locus: DSEL (human) mapping to 18q22.1; Dsel (mouse) mapping to 1 E2.2.

# SOURCE

DSEL (N-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of DSEL of human origin.

#### **STORAGE**

Store at  $4^{\circ}$  C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-85078 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

DSEL (N-19) is recommended for detection of DSEL of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

DSEL (N-19) is also recommended for detection of DSEL in additional species, including equine, canine and bovine.

Suitable for use as control antibody for DSEL siRNA (h): sc-75882, DSEL siRNA (m): sc-143177, DSEL shRNA Plasmid (h): sc-75882-SH, DSEL shRNA Plasmid (m): sc-143177-SH, DSEL shRNA (h) Lentiviral Particles: sc-75882-V and DSEL shRNA (m) Lentiviral Particles: sc-143177-V.

Molecular Weight of DSEL: 139 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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluo-rescence: 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™ Mounting Medium: sc-24941.

## **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.

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