# SANTA CRUZ BIOTECHNOLOGY, INC.

# NHSL2 (E-20): sc-248077



The Power to Question

## BACKGROUND

NHSL2 (NHS-like protein 2) is a 709 amino acid protein that belongs to the NHS family. The gene that encodes NHSL2 maps to human chromosome X. The X and Y chromosomes are the human sex chromosomes. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. The combination of a X and Y chromosome lead to normal male development while two copies of X lead to normal female development. There are a number of conditions related to an unusual number and combination of sex chromosomes being inherited, including Turner's syndrome, Klinefelter's syndrome and Triple X syndrome. Color blindness, hemophilia, and duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently as males carry a single X chromosome.

## REFERENCES

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- 4. Ozcelik, T. 2002. Uncovering the complex mysteries of mosaicism. Nature 417: 588.
- 5. Muntoni, F., et al. 2003. Dystrophin and mutations: one gene, several proteins, multiple phenotypes. Lancet Neurol. 2: 731-740.
- 6. Deeb, S.S. 2005. The molecular basis of variation in human color vision. Clin. Genet. 67: 369-377.
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- Hayashi, T., et al. 2006. Novel form of a single X-linked visual pigment gene in a unique dichromatic color-vision defect. Vis. Neurosci. 23: 411-417.
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### CHROMOSOMAL LOCATION

Genetic locus: NHSL2 (human) mapping to Xq13.1; Nhsl2 (mouse) mapping to X D.

#### SOURCE

NHSL2 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NHSL2 of human origin.

# **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

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

Blocking peptide available for competition studies, sc-248077 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

NHSL2 (E-20) is recommended for detection of NHSL2 of mouse, rat 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); non cross-reactive with NHSL1.

NHSL2 (E-20) is also recommended for detection of NHSL2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NHSL2 siRNA (h): sc-91109, NHSL2 siRNA (m): sc-153086, NHSL2 shRNA Plasmid (h): sc-91109-SH, NHSL2 shRNA Plasmid (m): sc-153086-SH, NHSL2 shRNA (h) Lentiviral Particles: sc-91109-V and NHSL2 shRNA (m) Lentiviral Particles: sc-153086-V.

Molecular Weight of NHSL2: 76 kDa.

#### **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) Immunofluo-rescence: use donkey anti-goat IgG-FITC: sc-2783 (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.

### **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.