# SANTA CRUZ BIOTECHNOLOGY, INC.

# GPATCH2 (N-13): sc-240525



The Power to Question

# BACKGROUND

GPATCH2 (G patch domain-containing protein 2) is a 528 amino acid protein that contains one G-patch domain. GPATCH2 is overexpressed in breast cancer tissue, and may have a role in breast cancer cell growth. Existing as two alternatively spliced isoforms, the gene encoding GPATCH2 maps to human chromosome 1q41 and mouse chromosome 1 H5. Spanning around 260 million base pairs, chromosome 1 is the largest human chromosome and comprises 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1.

# REFERENCES

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- 4. Betarbet, R., et al. 2008. Fas-associated factor 1 and Parkinson's disease. Neurobiol. Dis. 31: 309-315.
- Holliday, E.G., et al. 2009. Strong evidence for a novel schizophrenia risk locus on chromosome 1p31.1 in homogeneous pedigrees from Tamil Nadu, India. Am. J. Psychiatry 166: 206-215.
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## CHROMOSOMAL LOCATION

Genetic locus: GPATCH2 (human) mapping to 1q41; Gpatch2 (mouse) mapping to 1 H5.

# SOURCE

GPATCH2 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GPATCH2 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.

Blocking peptide available for competition studies, sc-240525 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

GPATCH2 (N-13) is recommended for detection of GPATCH2 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 other GPATCH family members.

Suitable for use as control antibody for GPATCH2 siRNA (h): sc-88295, GPATCH2 siRNA (m): sc-145679, GPATCH2 shRNA Plasmid (h): sc-88295-SH, GPATCH2 shRNA Plasmid (m): sc-145679-SH, GPATCH2 shRNA (h) Lentiviral Particles: sc-88295-V and GPATCH2 shRNA (m) Lentiviral Particles: sc-145679-V.

Molecular Weight of GPATCH2 isoform 1: 59 kDa.

Molecular Weight of GPATCH2 isoform 2: 43 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-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.

#### **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.