

APXL (N-18): sc-70114

BACKGROUND

APXL, also known as SHROOM2 or HSAPXL, is a 1,616 amino acid protein that localizes to a variety of locations within the cell, including the cytoplasm, the cytoskeleton, the cell junction and the apical cell membrane. Containing one ASD1 domain, one ASD2 domain and one PDZ domain, APXL interacts with F-actin and is thought to mediate endothelial cell morphology during cell spreading, possibly regulating melanosome biogenesis and inducing γ tubulin redistribution. APXL is expressed in kidney, brain, lung, pancreas and placenta and is overexpressed in melanomas, suggesting a role in tumor transformation and metastasis. The gene encoding APXL maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

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5. Etournay, R., Zwaenepoel, I., Perfettini, I., Legrain, P., Petit, C. and El-Amraoui, A. 2007. SHROOM2, a Myosin VIIa- and Actin-binding protein, directly interacts with ZO-1 at tight junctions. *J. Cell Sci.* 120: 2838-2850.
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CHROMOSOMAL LOCATION

Genetic locus: SHROOM2 (human) mapping to Xp22.2.

SOURCE

APXL (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of APXL of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-70114 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

APXL (N-18) is recommended for detection of APXL of 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).

APXL (N-18) is also recommended for detection of APXL in additional species, including canine and bovine.

Suitable for use as control antibody for APXL siRNA (h): sc-72525, APXL shRNA Plasmid (h): sc-72525-SH and APXL shRNA (h) Lentiviral Particles: sc-72525-V.

Molecular Weight of APXL: 176 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) 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.

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.