

# folliculin (FL-342): sc-25777

## BACKGROUND

Birt-Hogg-Dube (BHD) syndrome is a rare autosomal dominant cancer syndrome characterized by kidney tumors, benign tumors of the hair follicle and spontaneous pneumothorax. BHD is also associated with neoplastic colonic polyps. The BHD gene maps to chromosome 17p11.2 and encodes the protein folliculin. Folliculin is widely expressed. Notably, folliculin is expressed in the kidney, lung and skin where BHD tumors arise. Specifically, the (C)8 tract in exon 11 is a mutational hot spot in BHD. BHD appears to have reduced penetrance or late onset. In a study of the renal tumors in 30 BHD patients, preoperative computed tomography scans detect a mean of 5.3 tumors per patient with a range 1-28 tumors. Multiple and bilateral tumors appear at a mean of 50.7 years.

## REFERENCES

- Balus, L., et al. 1983. Fibrofolliculoma, trichodiscoma and acrochordon. The Birt-Hogg-Dube syndrome. *Ann. Dermatol. Venereol.* 110: 601-609.
- Schmidt, L.S., et al. 2001. Birt-Hogg-Dube syndrome, a genodermatosis associated with spontaneous pneumothorax and kidney neoplasia, maps to chromosome 17p11.2. *Am. J. Hum. Genet.* 69: 876-882.

## CHROMOSOMAL LOCATION

Genetic locus: FLCN (human) mapping to 17p11.2; Flcn (mouse) mapping to 11 B1.3.

## SOURCE

folliculin (FL-342) is a rabbit polyclonal antibody raised against amino acids 1-342 representing full length folliculin isoform 2 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.

## APPLICATIONS

folliculin (FL-342) is recommended for detection of folliculin isoforms 1 and 2 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for folliculin siRNA (h): sc-37412, folliculin siRNA (m): sc-37413, folliculin shRNA Plasmid (h): sc-37412-SH, folliculin shRNA Plasmid (m): sc-37413-SH, folliculin shRNA (h) Lentiviral Particles: sc-37412-V and folliculin shRNA (m) Lentiviral Particles: sc-37413-V.

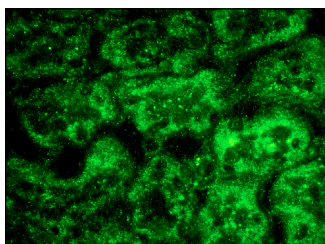
Molecular Weight of folliculin: 66 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224 or mouse kidney extract: sc-2255.

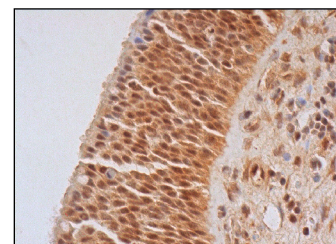
## RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



folliculin (FL-342): sc-25777. Immunofluorescence staining of normal mouse kidney frozen section showing cytoplasmic staining.



folliculin (FL-342): sc-25777. Immunoperoxidase staining of formalin fixed, paraffin-embedded human nasopharynx tissue showing nuclear and cytoplasmic staining of respiratory epithelial cells.

## SELECT PRODUCT CITATIONS

- Koga, S., et al. 2009. Lung cysts in Birt-Hogg-Dubé syndrome: histopathological characteristics and aberrant sequence repeats. *Pathol. Int.* 59: 720-728.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

**MONOS**  
Satisfaction  
Guaranteed

Try **folliculin (D-4): sc-271558**, our highly recommended monoclonal alternative to folliculin (FL-342).