Basal bodies/ciliated cells (LhS 28): sc-53224

**BACKGROUND**
Flagella and cilia are both membrane-bound projections from the cell surface that beat in distinctive patterns. Cilia are shorter and usually more profuse than flagella and contain a microtubule cytoskeleton, the ciliary axoneme, surrounded by a ciliary membrane. Microtubules of cilia arise from centrioles, sites of dense material that localize to the base of the completed structure as a basal body. Nine pairs of microtubules form a ring around two central microtubules, creating an arrangement called a “9 + 2 array.” A system of spokes and links holds this arrangement together. In contrast, single nonmotile 9 + 0 primary cilia reside on epithelial cells, such as those of the kidney tubule, and also on nonepithelial cells, such as chondrocytes, fibroblasts and neurons. The ciliary membranes of all cilia hold specific receptors and ion channel proteins that initiate signaling pathways that regulate motility and/or link mechanical or chemical stimuli to intracellular transduction cascades regulating differentiation, migration and cell growth during development and in adulthood.

**REFERENCES**

**APPLICATIONS**
Basal bodies/ciliated cells (LhS 28) is recommended for detection of basal bodies of cilia in all ciliated cells of 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 and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Positive Controls: human fallopian tissue extract.

**RECOMMENDED SECONDARY REAGENTS**
To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminal 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-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400).

**DATA**
Basal bodies/ciliated cells (LhS 28): sc-53224. Western blot analysis of a novel protein associated with the basal bodies of ciliated cells expressed in human fallopian tissue extract.

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

**SOURCE**
Basal bodies/ciliated cells (LhS 28) is a mouse monoclonal antibody raised against a cytoskeletal preparation of BHK a21 human cell line expressing cilia basal bodies.

**PRODUCT**
Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**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.