

cadherin-16 (C-16): sc-46302

BACKGROUND

The cadherins are a family of Ca^{2+} -dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of structure and morphogenesis. Cadherins each contain a large extracellular domain at the N-terminus, which is characterized by a series of five homologous repeats, the most distal of which is thought to be responsible for binding specificity. Cadherin-16, also known as Ksp-cadherin, is a type I membrane protein which is kidney-specific. Cadherin-16 is expressed exclusively in the basolateral membrane of renal tubular epithelial cells. The human Ksp-cadherin gene (cadherin-16) maps to chromosome 16q21-proximal 16q22.1. The mouse Ksp-cadherin gene was localized to a highly syntenic region of distal chromosome 8.

CHROMOSOMAL LOCATION

Genetic locus: CDH16 (human) mapping to 16q22.1; Cdh16 (mouse) mapping to 8 D3.

SOURCE

cadherin-16 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of cadherin-16 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-46302 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

cadherin-16 (C-16) is recommended for detection of cadherin-16 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

cadherin-16 (C-16) is also recommended for detection of cadherin-16 in additional species, including equine.

Suitable for use as control antibody for cadherin-16 siRNA (h): sc-45610, cadherin-16 siRNA (m): sc-45611, cadherin-16 shRNA Plasmid (h): sc-45610-SH, cadherin-16 shRNA Plasmid (m): sc-45611-SH, cadherin-16 shRNA (h) Lentiviral Particles: sc-45610-V and cadherin-16 shRNA (m) Lentiviral Particles: sc-45611-V.

Molecular Weight (predicted) of cadherin-16: 90 kDa.

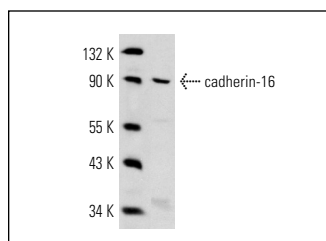
Molecular Weight (observed) of cadherin-16: 84-131 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



cadherin-16 (C-16): sc-46302. Western blot analysis of cadherin-16 expression in Caki-1 whole cell lysate.

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.



Try **cadherin-16 (E-7): sc-393153** or **cadherin-16 (H-10): sc-393132**, our highly recommended monoclonal alternatives to cadherin-16 (C-16).