

# FAT4 (165E2K): sc-517614

## BACKGROUND

The cadherins represent a family of  $\text{Ca}^{2+}$ -dependent adhesion molecules that function to mediate cell to cell binding that is critical for the maintenance of structure and morphogenesis. Cadherins 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. The relatively short C-terminal intracellular domain interacts with a variety of cytoplasmic proteins, including  $\beta$ -catenin, to regulate cadherin function. The cadherin superfamily includes cadherins, protocadherins, desmogleins and desmocollins. FAT4 (FAT tumor suppressor homolog 4), also known as FAT-J, CDHF14 or CDHR11, is a 4,981 amino acid single-pass type I membrane protein that belongs to the protocadherin subfamily of cadherins and localizes to the primary cilia of kidney. Widely expressed, FAT4 contains 34 cadherin domains, 6 EGF-like domains and 2 laminin G-like domains. FAT4 may function in the regulation of planar cell polarity.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: FAT4 (human) mapping to 4q28.1.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

FAT4 (165E2K) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 4500-4786 of FAT4 of human origin.

## PRODUCT

Each vial contains 100  $\mu\text{g}$  IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

FAT4 (165E2K) is recommended for detection of FAT4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for FAT4 siRNA (h): sc-88877, FAT4 shRNA Plasmid (h): sc-88877-SH and FAT4 shRNA (h) Lentiviral Particles: sc-88877-V.

Molecular Weight of FAT4: 543 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup>  
Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.