Occludin (E-5): sc-133256

**BACKGROUND**

Occludin is an integral membrane protein closely associated with the tight junctions of epithelial and endothelial cells. Occludin is a tetraspan integral membrane protein in epithelial and endothelial tight junction (TJ) structures that can contain two extracellular loops. The protein exists in a variety of phosphorylated forms. Phosphorylation is involved in regulating both the localization and the function of Occludin. Expression of Occludin is up-regulated by polyunsaturated fatty acids, increasing transendothelial cell resistance and reducing cellular permeability to large molecules. The level of Occludin varies greatly depending on tissue; in brain tissue, Occludin is highly expressed at cell-cell contact sites. Non-neural tissues show lower expression and discontinuous distribution. Up-regulation of epithelial Occludin may play a role in enhancing paracellular permeability and be related to the damage to the tight junction.

**CHROMOSOMAL LOCATION**

Genetic locus: OCLN (human) mapping to 5q13.2; Occlin (mouse) mapping to 13 D1.

**SOURCE**

Occludin (E-5) is a mouse monoclonal antibody raised against amino acids 132-411 mapping within an internal region of Occludin of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Occludin (E-5) is available conjugated to agarose (sc-133256 HRP), 200 µg/ml, for IP; to HRP (sc-133256 HRP), 200 µg/ml, for WB, HRP) and ELISA; to either phycoerythrin (sc-133256 PE), fluorescein (sc-133256 FITC), Alexa Fluor® 488 (sc-133256 AF488), Alexa Fluor® 546 (sc-133256 AF546), Alexa Fluor® 594 (sc-133256 AF594) or Alexa Fluor® 647 (sc-133256 AF647), 200 µg/ml, for WB (RGB), IF, HRP) and FCM; and to either Alexa Fluor® 680 (sc-133256 AF680) or Alexa Fluor® 790 (sc-133256 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Occludin (E-5) is recommended for detection of Occludin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Occludin (E-5) is suitable for use as control antibody for Occludin siRNA (h): sc-36117, Occludin siRNA (m): sc-36118, Occludin shRNA Plasmid (h): sc-36118-SH, Occludin shRNA Plasmid (m): sc-36118-SH, Occludin shRNA (h) Lentiviral Particles: sc-36117-V and Occludin shRNA (m) Lentiviral Particles: sc-36118-V.

**STORAGE**

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

**DATA**

Occludin (E-5): sc-133256. Western blot analysis of Occludin expression in COLO 205 (A) and Hep G2 (B) whole cell lysates and human colon (C) and human kidney (D) tissue extracts.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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