SANTA CRUZ BIOTECHNOLOGY, INC.

μ-protocadherin (G-20): sc-54115



BACKGROUND

The mucin-like protocadherin, µ-protocadherin, is a developmentally regulated, single-pass type I transmembrane protein that belongs to the cadherin superfamily. It contains four cadherin-like ectodomains, a triply repeating mucin domain, four SH3 binding regions, N- and O-glycosylation sites and a possible C-terminal PDZ binding domain. u-protocadherin is expressed in various epithelial tissues and localizes to the apical surface along the brush border of the proximal convoluted tubule. It acts as a calcium-dependent cell adhesion molecule mediating cell aggregation and may play a role in the activation of signaling events. Due to alternative splicing at least four isoforms exist for µ-protocadherin. These isoforms vary in the region containing the mucin-like domains. Only the longest isoform contains the triply repeating mucin domain.

REFERENCES

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- 3. Goldberg, M., Wei, M., Tycko, B., Falikovich, I. and Warburton, D. 2002. Identification and expression analysis of the human µ-protocadherin gene in fetal and adult kidneys. Am. J. Physiol. Renal Physiol. 283: F454-F463.
- 4. Goldberg, M., Wei, M., Yuan, L., Murty, V.V. and Tycko, B. 2003. Biallelic expression of HRAS and MUCDHL in human and mouse. Hum. Genet. 112: 334-342.
- 5. Wang, Y., Jatkoe, T., Zhang, Y., Mutch, M.G., Talantov, D., Jiang, J., McLeod, H.L. and Atkins, D. 2004. Gene expression profiles and molecular markers to predict recurrence of Dukes' B colon cancer. J. Clin. Oncol. 22: 1564-1571.
- 6. Moulton, D.E., Crandall, W., Lakhani, R. and Lowe, M.E. 2004. Expression of a novel cadherin in the mouse and human intestine. Pediatr. Res. 55: 927-934.
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CHROMOSOMAL LOCATION

Genetic locus: Mucdhl (mouse) mapping to 7 F5.

SOURCE

μ-protocadherin (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of μ -protocadherin of mouse origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-54115 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

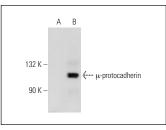
μ-protocadherin (G-20) is recommended for detection of μ-protocadherin of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with isoform 2 of mouse origin.

Suitable for use as control antibody for µ-protocadherin siRNA (m): sc-152486, µ-protocadherin shRNA Plasmid (m): sc-152486-SH and µ-protocadherin shRNA (m) Lentiviral Particles: sc-152486-V.

Molecular Weight of µ-protocadherin isoforms: 110-220 kDa.

Positive Controls: µ-protocadherin (m): 293T Lysate: sc-127848.

DATA



µ-protocadherin (G-20): sc-54115. Western blot analysis of μ -protocadherin expression in non-transfected: sc-117752 (**A**) and mouse μ -protocadherin transfected: sc-127848 (B) 293T whole cell lysates

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.

MONOS Satisfation Guaranteed

Try protocadherin (A-11): sc-166953 or µ-protocadherin (G-1): sc-271138, our highly recommended monoclonal alternatives to µ-protocadherin (G-20).