



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 



Mouse anti E-Cadherin / Cadherin-1

Catalogue number: **MUB0301P**

Clone	5H9
Isotype	IgG1
Product Type	Primary Antibodies
Units	0.1 mg
Host	Mouse
Species reactivity	Human
Application	Immunoblotting Immunocytochemistry Immunohistochemistry (frozen) Immunohistochemistry (paraffin)

Distributors

For Purchasing Information,
please contact your local
distributor

[Find Distributor](#)

Background

Cadherins constitute a family of transmembrane glycoproteins involved in Ca^{2+} -dependent cell-cell interactions. The members of this family are differentially expressed in various tissues. They function in the maintenance of tissue integrity and morphogenesis. Cadherins are divided into type I and type II subgroups. Type I cadherins include epithelial cadherin (E-cadherin, cadherin-1 or uvomorulin), neural cadherin (N-cadherin or cadherin-2), placental cadherin (P-cadherin or cadherin-3) and retinal cadherin (R-cadherin or cadherin-4), whereas kidney cadherin (K-cadherin or cadherin-6) and osteoblast cadherin (OB-cadherin or cadherin-11) are type II cadherins. One of the best characterized cadherins is E-cadherin, a 120 kD transmembrane glycoprotein consisting of an 80 kD extracellular and a 40 kD transmembrane and cytoplasmic part. The extracellular domains of E-cadherin are responsible for calcium binding which allows for homophilic interaction with other E-cadherin molecules on the same cell and neighbouring cells. In addition, E-cadherin can interact heterophilically with integrin $\alpha\text{E}\beta 7$. The cytoplasmic domain of E-cadherin is linked to the actin cytoskeleton through the associated

Figure 1
Immunohistochemistry
on paraffin-embedded
sections of small
intestine.



cytoplasmic Catenin proteins, thus establishing a complex localized to adherens junctions. In carcinomas E-cadherin is frequently downregulated, which is consistent with its function of an invasion suppressor in normal epithelia.

Source

5H9 is a Mouse monoclonal IgG1 antibody obtained by fusion of P3-X63-Ag 8,653 Mouse myeloma cells with spleen cells from a BALB/c Mouse immunized with affinity purified 80 kD extracellular fragments of E-cadherin derived from tryptic digestion of A-431 Human vulva carcinoma cells.

Product

Each vial contains 100 ul of 1 mg/ml purified monoclonal antibody in PBS containing 0.09% sodium azide.

Applications

5H9 is suitable for immunoblotting, immunocytochemistry and immunohistochemistry on frozen and paraffin embedded tissues. For frozen tissues use a PBS buffer containing 0.1 mM CaCl₂ and 0.1 mM MgCl₂. For paraffin embedded tissues use a pretreatment step of 15 minutes incubation in TRIS-EDTA buffer pH 9 in a microwave. Optimal antibody dilution should be determined by titration, recommended range is 1:50 – 1:100 for immunohistochemistry with avidin-biotinylated Horseradish peroxidase complex (ABC) as detection reagent, and 1:100 – 1:500 for immunoblotting applications.

Specificity

5H9 recognizes both the 120 kD E-cadherin and its 80 kD trypsin-resistant extracellular part.

Storage

Store at 4°C, or in small aliquots at -20°C.

References

1. Frixen, U. H., Behrens, J., Sachs, M., Eberle, G., Voss, B., Warda, A., Lochner, D., and Birchmeier, W. (1991). E-cadherin-mediated cell-cell adhesion prevents invasiveness of Human carcinoma cells, *J Cell Biol* 113, 173-85.
2. Moll, R., Mitze, M., Frixen, U. H., and Birchmeier, W. (1993). Differential loss of E-cadherin expression in infiltrating ductal and lobular breast carcinomas, *Am J Pathol* 143, 1731-42.
3. Gabbert, H. E., Mueller, W., Schneiders, A., Meier, S., Moll, R., Birchmeier, W., and Hommel, G. (1996). Prognostic value of E-cadherin

expression in 413 gastric carcinomas. Int J Cancer 69, 184-189.

4. Schwechheimer, K., Zhou, L., and Birchmeier, W. (1998). E-Cadherin in Human brain tumours: loss of immunoreactivity in malignant meningiomas. Virchows Arch 432, 163-167.

Caution

This product is intended FOR RESEARCH USE ONLY, and FOR TESTS IN VITRO, not for use in diagnostic or therapeutic procedures involving humans or animals. This product contains sodium azide. To prevent formation of toxic vapors, do not mix with strong acidic solutions. To prevent formation of potentially explosive metallic azides in metal plumbing, always wash into drain with copious quantities of water. This datasheet is as accurate as reasonably achievable, but Nordic-MUbio accepts no liability for any inaccuracies or omissions in this information.