

BM5098**Monoclonal Antibody to Cingulin - Supernatant**

Alternate names:	CGN, KIAA1319
Quantity:	5 ml
Background:	Cingulin, a polypeptide of 126.5 kD (calculated from aa sequence data); apparent Mr 150 kD (after SDS-PAGE); pI 6.5 (very similar to that of symplekin, another junctional protein).
Uniprot ID:	Q9P2M7
NCBI:	NP_065821.1
GeneID:	57530
Host / Isotype:	Mouse / IgM
Clone:	139.3.4
Immunogen:	Synthetic peptide (aa. 4-24)
Format:	State: Liquid Culture Supernatant Preservatives: 0.09% Sodium Azide
Applications:	Immunoblotting. Immunohistochemistry on Frozen and Paraffin Sections (only after microwave treatment): Ready-to-use. On cultured cell fixation with paraformaldehyde is recommended for optimal staining. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This monoclonal antibody reacts specifically with Cingulin (a 150 kD polypeptide) present in tight junctions (zonula occludens) of polar epithelia (e.g. colon, duodenum, kidney, liver, pancreas), of transitional epithelia (e.g. bladder epithelium), and of stratified epithelia (e.g. skin, foot sole, tongue, oesophagus, vagina). Negative with endothelia of vessels and capillaries (e.g. in heart and brain). In contrast to Symplekin, using Monoclonal antibody 139.4 Cingulin has been localized exclusively to the tight junction complex. Tested Reactivities on Cultured Cell Lines: Carcinoma cell lines (e.g. MCF-7, Caco-2, PLC, A-431), SV80 (fibroblasts), Glioma; MDBK, MDCK, BMGE.
Species Reactivity:	Tested: Human, Bovine, Mouse and Xenopus laevis. Negative with Rabbit.
Storage:	Store the antibody undiluted at 2-8°C. Shelf life: one year from despatch.
General Readings:	1. Keon BH, Schäfer S, Kuhn C, Grund C, Franke WW. Symplekin, a novel type of tight junction plaque protein. J Cell Biol. 1996 Aug;134(4):1003-18. PubMed PMID: 8769423. 2. Zahraoui A, Louvard D, Galli T. Tight junction, a platform for trafficking and signaling protein complexes. J Cell Biol. 2000 Nov 27;151(5):F31-6. PubMed PMID: 11086016. 3. Langbein L, Grund C, Kuhn C, Praetzel S, Kartenbeck J, Brandner JM, et al. Tight

junctions and compositionally related junctional structures in mammalian stratified epithelia and cell cultures derived therefrom. *Eur J Cell Biol.* 2002 Aug;81(8):419-35. PubMed PMID: 12234014.

4. Langbein L, Pape UF, Grund C, Kuhn C, Praetzel S, Moll I, et al. Tight junction-related structures in the absence of a lumen: occludin, claudins and tight junction plaque proteins in densely packed cell formations of stratified epithelia and squamous cell carcinomas. *Eur J Cell Biol.* 2003 Aug;82(8):385-400. PubMed PMID: 14533737.