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ImmunO™

Monoclonal Mouse Anti-Epithelial Keratin - AE5
Catalog #: 69143
Lot #: R12101

Description: This antibody is specific for the basic 64K keratin[2] which, together with the acidic 55K keratin, has been designated as a marker for "corneal-type differentiation".[1,3] Studies on the expression of the 64K keratin in vivo and in cultured rabbit corneal epithelial cells have led Schermer, et al,[2] to suggest that corneal epithelial stem cells are located in the limbus, the transitional zone between the cornea and the conjunctiva. This antibody also reacts with lip and snout epithelia (cow and rabbit).[2] For AE5 antibody, unfixed, frozen section works much better than formaldehyde-fixed sections. This product is presented as the purified IgG fraction from ascites production in phosphate buffered saline, pH 7.2.

Preparation: The AE5 monoclonal anti-keratin was prepared against human epidermal keratin by hybridoma technique. The AE5 was reactive with the 64K keratins in the cornea.

Working Dilution: 1:500 (Immunoblot - human epithelial cornea)
1:50 (Immunofluorescence - human epithelial cornea)

It is recommended that each lab obtain their own optimum working dilution.

Antibody Conc.: 1.0 mg/ml.

Storage: Store frozen at or below -20^{o}C.

References: 1. Sun, T.T., Eichner, R., Cooper, D., Schermer, A., Nelson, W.G. and Weiss, R.A., "Classification, Expression, and Possible Mechanisms of Evolution of Mammalian Epithelial Keratins: A Unifying Model",*The Cancer Cell*, **v. 1**, 169-176 (1984.

2. Schermer, A., Galvin, S. and Sun, T.T., "Differentiation-Related Expression of a Major 64K Corneal Keratin in Vivo and in Culture Suggests Limbal Location of Corneal Epithelial Stem Cells",*J. Cell Biol.*, **v. 103**, 49-62 (1986).

3. Cooper, D., Schermer, A. and Sun, T.T., "Classification of Human Epithelial and Their Neoplasms Using Monoclonal Anti-Keratin Antibodies: Strategies, Applications and Limitations",*Lab. Invest.*, **v. 52**, 243-256 (1985).

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Control # R0204