

Keratin 19. Mouse cIn A53-B/A2 Monoclonal Antibody, Human

BACKGROUND

Cytokeratins (CK) are intermediate filaments of epithelial cells, both in keratinizing tissue (ie., skin) and non-keratinizing cells (ie., mesothelial cells). Although not a traditional marker for endothelial cells, cytokeratins have also been found in some microvascular endothelial cells. At least 20 different cytokeratins (CK) in the molecular range of 40-70 kDa and isoelectric points of 5-8.5 can be identified using two dimensional gel electrophoresis. Biochemically, most members of the CK family fall into one of two classes, type I (acidic polypeptides) and type II (basic polypeptides). At least one member of the acidic family and one member of the basic family is expressed in all epithelial cells. Monoclonal antibodies to cytokeratin proteins can be useful markers for tumor identification and classification.

Keratin 19 has been implicated as a marker for stem cells in some tissues, such as the hair follicles in the skin. It is also associated with malignant transformation in esophageal and pancreatic cancers.

IMMUNOGEN

Human breast cancer cell line MCF-7

COMMENTS

Detects Keratin 19 by Western blot. Detects a 40 kDa band and recognizes an epitope within the rod domain of Keratin 19 between amino acids 312 and 335.

STORAGE CUSTOMER

Product should be stored at -20 degrees C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

ORDERING INFORMATION

CATALOG NUMBER
X1256M

SIZE
100 µg

FORM
Purified

HOST/CLONE
Mouse cIn A53-B/A2

FORMULATION
Provided as 0.2 µm sterile filtered solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
1 mg/ml

ISOTYPE
IgG2a

APPLICATIONS
Paraffin Section
Frozen Tissue Staining
Immunohistochemistry
Western Blotting

SPECIES REACTIVITY

Human

POSITIVE CONTROL

Not Available

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

REFERENCES

1. Kasper, M., et al. "Coexpression of cytokeratin and vimentin in Rathke's cysts of the human pituitary gland." *Cell Tissue Res.* 1988, 253, 419-424.
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3. Kasper, M., et al. "Histological evaluation of three new monoclonal anti-cytokeratin antibodies. 1. Normal tissues." *Eur. J. Cancer Clin. Oncol.* 1987, 23, 137-147.
4. Kasper, M., et al. "Distribution of intermediate-filament proteins in the human enamel organ: unusually complex pattern of coexpression of cytokeratin polypeptides and vimentin." *Differentiation* 1989, 40, 207-214.
5. Stosiek, P., et al. "Expression of cytokeratin 19 during human liver organogenesis." *Liver* 1990, 10, 59-63.
6. Karsten, U., et al. "Subtypes of non-transformed human mammary epithelial cells cultured in vitro: histo-blood group antigen H type 2 defines basal cell-derived cells." *Differentiation* 1993, 54, 55-66.
7. Brembeck, F.H. & Rustgi, A.K. "The tissue-dependent keratin 19 gene transcription is regulated by GKLF/KLF4 and Sp1." *J. Biol. Chem.* 2000, 275, 28230-28234.

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