


Mouse anti human Keratin 20 Monoclonal Antibody (Clone Ks20.8)

REFERENCES AND PRESENTATIONS¹

- **ready-to-use (manual or LabVision AutoStainer)**
MAD-005105QD-3
MAD-005105QD-7
MAD-005105QD-12
- **Ready-to-use (MD-Stainer)²**
MAD-005105QD-3/V
MAD-005105QD/V
- **concentrated**
MAD-005105Q - 1:50 recommended dilution

COMPOSITION

Anti-human Keratin 20 mouse monoclonal antibody purified from serum and prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide

INTENDED USE : Immunohistochemistry (IHC) on paraffin embedded tissues. Not tested on frozen tissues or Western-Blotting

CLONE: Ks20.8

Ig ISOTYPE: Mouse IgG2a

IMMUNOGEN: Semi-purified human cytokeratin preparation.

SPECIES REACTIVITY: In vitro diagnostics in humans. Not tested in other species

DESCRIPTION AND APPLICATIONS: Keratins (also known as cytokeratins) are intermediate filament/forming proteins that represents the main cytoskeleton of epithelial cells. They classically are classified based on Moll cataloging which grouped the basic-to-neutral type II keratins as K1–K8 and the acidic type I keratins as K9–K19. An updated classification including 24 types of keratins was then proposed in order to enable other mammalian species keratins to be added.

Keratin 20 / cytokeratin20 (CK20) is a Type-I keratin which is primarily expressed in gastric and intestinal epithelium, urothelium, and Merkel-cells.

CK20 is expressed in adenocarcinomas of the colon, stomach, pancreas and the bile system. CK20 is also present in mucinous ovarian tumors, transitional-cell



and Merkel cell carcinomas. Notably, the squamous cell carcinomas and adenocarcinomas of the breast, lung, and endometrium, nonmucinous tumors of the ovary, and small cell carcinomas lack in CK20.

IHC POSITIVE CONTROL: Normal Colon

VISUALIZATION: Cytoplasm

IHC RECOMMENDED PROCEDURE:

- 4µm thick section should be taken on charged slides; dry overnight at 60°C
- Deparaffinise, rehydrate and HIER (heat induced epitope retrieval) – boil tissue in the Pt Module using Vitro S.A EDTA buffer pH8³ for 20 min at 95°C. Upon completion rinse with 3-5 changes of distilled or deionised water followed by cooling at RT for 20 min
- Endogenous peroxidase block - Blocking for 10 minutes at room temperature using peroxidase solution (ref. MAD-021540Q-125)
- Primary antibody: incubate for 10 minutes [The antibody dilution (when concentrated) and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory]
- For detection use Master Polymer Plus Detection System (HRP) (DAB included; ref. MAD-000237QK)
- Counterstaining with haematoxylin and final mounting of the slide

STORAGE AND STABILITY:  up to 18 months;  stored at 2-8°C. Do not freeze.

WARNINGS AND PRECAUTIONS:

1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water.
2. This product is harmful if swallowed.
3. Consult local or state authorities with regard to recommended method of disposal.
4. Avoid microbial contamination of reagents.

SAFETY RECOMMENDATIONS:

This product is intended for laboratory professional use only. The product is NOT intended to be used as a drug or for domestic purposes. The current version of the Safety Data Sheet for this product can be downloaded by searching the reference number at www.vitro.bio or can be requested at regulatory@vitro.bio.

³ Ref: MAD-004072R/D

¹ These references are for presentation in vials of Low Density Polyethylene (LDPE) dropper. In case the products are used in automated stainers, a special reference is assigned as follows:
- / L: Cylindrical screw-cap vials (QD-3 / L, QD-7 / L, QD-12 / L).
- / N: Polygonal screw-cap vials (QD-3 / N, QD-7 / N, QD-12 / N).
For different presentations (references / volumes) please contact the supplier.

² For Technical specifications for MD-Stainer, please contact your distributor.



BIBLIOGRAPHY

1. Leech S N, Kolar A J O, Barrett P D, et al.. Merkel cell carcinoma can be distinguished from metastatic small cell carcinoma using antibodies to cytokeratin 20 and thyroid transcription factor 1. *Journal of Clinical Pathology*. **54** :727-729 (2001).
2. Harnden P, Allam A, Joyce A D, et al.. Cytokeratin 20 expression by non-invasive transitional cell carcinomas: potential for distinguishing recurrent from non-recurrent disease. *Histopathology*. **27** :169-174 (1995).
3. Moll R, Löwe A, Laufer J, et al.. Cytokeratin 20 in Human Carcinomas. A new histodiagnostic marker detected by monoclonal antibodies. *American Journal of Pathology*. **140(2)**:427-447 (1992).
4. Moll R, Schiller D L and Franke W W. Identification of protein IT of the intestinal cytoskeleton as a novel type I cytokeratin with unusual properties and expression patterns. *The Journal of Cell Biology*. **111** :567-580 (1990).



Vitro S.A.

Calle Luís Fuentes Bejarano 60 Ed. Nudo Norte Local 3 41020 Sevilla (Spain)
Tel: +34 954 933 200. [vitro@vitro.bio](mailto:vitra@vitro.bio) ; www.vitro.bio



2017-07-06

Página 2 de 2