PRODUCT INFORMATION



Cytokeratin 8 (C-Term) Rabbit Monoclonal Antibody (Clone RM266) Item No. 32216

Overview and Properties

Contents:	This vial contains 100 μ l of protein A-affinity purified monoclonal antibody.
Synonyms:	CK-8, Keratin, Type II Cytoskeletal 8, Keratin-8, KRT8
Immunogen:	Peptide from the C-terminal region of human cytokeratin 8
Cross Reactivity:	(+) Cytokeratin 8
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM266
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution for IHC and WB is 1:1,000-1:2,000. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically

Images



WB of HeLa cell lysates using Cytokeratin 8 (C-Term) Rabbit Monoclonal Antibody (Clone RM266) at a dilution of 1:1,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human breast cancer tissue sections using Cytokeratin 8 (C-Term) Rabbit Monoclonal Antibody (Clone RM266) at a dilution of 1:2.000.

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Cytokeratin 8 is a type II epithelial intermediate filament protein.¹ It is composed of a central rod containing four α -helical domains, which are important for self-assembly, and non-helical head and tail domains at the N- and C-termini, respectively. Cytokeratin 8 is expressed in single-layered epithelial cells and epithelial-derived tumor cells.² It dimerizes with the type I epithelial intermediate filament protein cytokeratin 18 to form a network of filament bundles throughout the cytoplasm.³ The tail of cytokeratin 8 binds to plasminogen and mediates invasiveness of cancer cells *in vitro*.⁴ A null mutation in *KRT8*, the gene encoding cytokeratin 8, is embryonic lethal in C57BL/6 x 129Sv, but not FVB/N, mice, which develop colorectal hyperplasia.⁵ Substitution mutations in *KRT8*, corresponding to residues in the head domain of the protein, disrupt filament reorganization following oxidative and non-oxidative stress *in vitro* and are associated with cryptogenic liver disease.² Intratumoral levels of cytokeratin 8 and -18 are correlated with poor prognosis in patients with squamous cell carcinomas of the oral cavity.⁶ Cayman's Cytokeratin 8 (C-Term) Rabbit Monoclonal Antibody (Clone RM266) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

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- Ku, N.-O., Gish, R., Wright, T.L., et al. Keratin 8 mutations in patients with cryptogenic liver disease. N. Engl. J. Med. 344(21), 1580-1587 (2001).
- Gonias, S.L., Hembrough, T.A., and Sankovic, M. Cytokeratin 8 functions as a major plasminogen receptor in select epithelial and carcinoma cells. *Front Biosci.* 6, 1403-1411 (2001).
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