PRODUCT INFORMATION



Cytokeratin 14 (C-Term) Rabbit Monoclonal Antibody (Clone RM328) Item No. 32266

Overview and Properties

Contents:	This vial contains 100 μ l of protein A-affinity purified monoclonal antibody.
Synonyms:	CK-14, Keratin-14, Keratin, Type II Cytoskeletal 14, KRT14
Immunogen:	Peptide from the C-terminal region of human cytokeratin 14
Cross Reactivity:	(+) Cytokeratin 14
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:	RM328
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 A431 cell lysate using Cytokeratin 14 (C-Term) Rabbit Monoclonal Antibody (Clone RM328) at a dilution of 1:1,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human cervix tissue using Cytokeratin 14 (C-Term) Rabbit Monoclonal Antibody (Clone RM328) at a 1:2,000 dilution.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human cervical squamous cell carcinoma tissue using Cytokeratin 14 (C-Term) Rabbit Monoclonal Antibody (Clone RM328) at a 1:2,000 dilution.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human tonsil tissue using Cytokeratin 14 (C-Term) Rabbit Monoclonal Antibody (Clone RM328) at a 1:2,000 dilution.

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.

WARRANTY AND LIMITATION OF REMEDY 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 14 (CK-14) is a type I acidic 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.^{2,3} CK-14 is expressed in stratified squamous epithelial cells, keratinocytes, and myoepithelial cells in the basal layer of the epidermis and is an integral component of the epithelial cell cytoskeleton.^{1,4,5} It dimerizes with the type II basic epithelial intermediate filament protein CK-5 via heptad repeats in the central rod domain to form a network of filament bundles throughout the cytoplasm.^{2,3} Increased tumor levels of CK-14 have been found in patients with squamous cell carcinomas of the bladder, lung, or cervix.⁶ Mutations in the gene encoding CK-14 have been found in patients with epidermolysis bullosa simplex (EBS), a disorder characterized by skin blistering.⁷ Cayman's Cytokeratin 14 (C-Term) Rabbit Monoclonal Antibody (Clone RM328) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

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- 7. Atkinson, S.D., McGilligan, V.E., Liao, H., et al. Development of allele-specific therapeutic siRNA for keratin 5 mutations in epidermolysis bullosa simplex. J. Invest. Dermatol. 131(10), 2079-2086 (2011).

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