

Cytokeratin HMW Monoclonal Antibody (34BetaE12)

Product Details	
Size	500 µL
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	34BetaE12
Conjugate	Unconjugated
Immunogen	Solubilized keratin extracted from human stratum corneum
Form	Liquid
Concentration	Conc. Not Determined
Storage buffer	tissue culture supernatant
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_10983918

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000-1:10,000	-
Immunohistochemistry (IHC)	-	12 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:50-1:100	1 Publication
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunocytochemistry (ICC/IF)	1:250	-

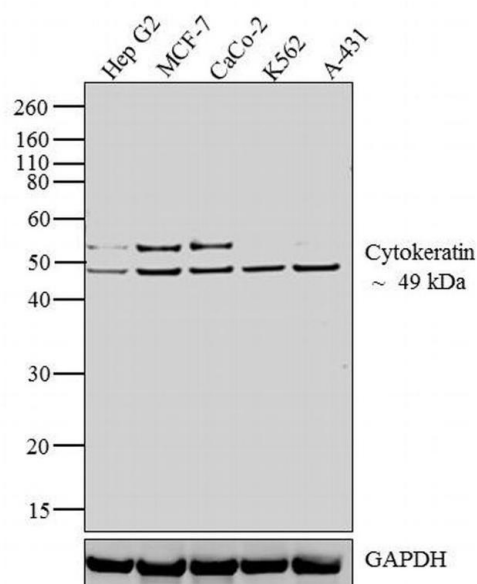
Product Specific Information

MA5-12135 targets Cytokeratin HMW and it recognizes keratin 1, 5, 10, and 14 in the Moll catalog (MW 68kDa, 58kDa, 56.5 kDa, and 50kDa), respectively. The antibody has been tested in ICC/IF, WB and IHC (P) applications and shows reactivity with Equine, Human, Non-human primate, and Rabbit samples. This antibody does not react with rat tissue in Western blot applications.

In normal cells, Cytokeratin HMW labels squamous, ductal and other complex epithelia. It reacts with benign small-acinar lesions of the prostate and does not react with hepatocytes, pancreatic acinar cells, proximal renal tubes or endometrial glands. In tumor cells, this antibody is reactive with both squamous and ductal neoplasms and variably with those derived from simple epithelium.

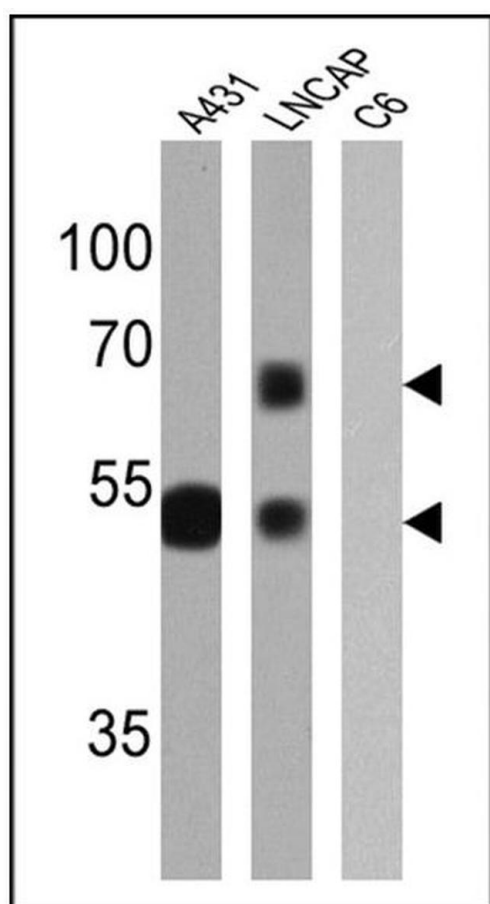
The MA5-12135 immunogen is solubilized keratin extracted from human stratum corneum.

Product Images For Cytokeratin HMW Monoclonal Antibody (34BetaE12)



Cytokeratin HMW Antibody (MA5-12135) in WB

Western blot analysis was performed on whole cell extracts (30 µg lysate) of Hep G2 (lane 1), MCF-7 (lane 2), CaCo-2 (lane 3), K562 (lane 4) and A-431 (lane 5). The blots were probed with Anti-Cytokeratin Mouse Monoclonal Antibody (Product # MA5-12135, 1:1000-1:10,000 dilution) and detected by chemiluminescence Goat anti-Mouse IgG (H+L) Secondary Antibody, HRP conjugate (Product # 62-6520, 1:4000 dilution). A 49 kDa band corresponding to Cytokeratin was observed across the cell lines tested along with an additional band at ~ 52 kDa in Hep G2, MCF-7 and CaCo-2. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 12 % Bis-Tris gel (Product # NP0342BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).

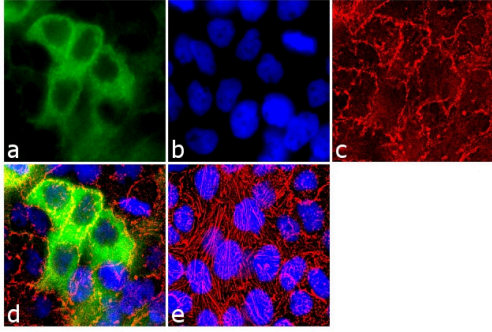


Cytokeratin HMW Antibody (MA5-12135) in WB

Western blot analysis of Cytokeratin HMW was performed by loading 25 µg of A431 (lane 1), LNCAP (lane 2) and C6 (lane 3) cell lysates onto an SDS polyacrylamide gel. Proteins were transferred to a PVDF membrane and blocked at 4°C overnight. The membrane was probed with a Cytokeratin HMW monoclonal antibody (Product # MA5-12135) at a dilution of 1:2000 overnight at 4°C, washed in TBST, and probed with an HRP-conjugated secondary antibody for 1 hr at room temperature in the dark. Chemiluminescent detection was performed using Pierce ECL Plus Western Blotting Substrate (Product # 32132). Results show a band at ~50-67 kDa in A431 and LNCAP cells.

Cytokeratin HMW Antibody (MA5-12135) in ICC/IF

Immunofluorescence analysis of Cytokeratin HMW was done on 70% confluent log phase A431 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with of Cytokeratin HMW (34BetaE12) Mouse Monoclonal Antibody (Product # MA5-12135) at 1:250 dilution in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d is a merged image showing cytoplasmic localization. Panel e is a no primary antibody control. The images were captured at 60X magnification.



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Immunohistochemistry (12)

Biotechnic & histochemistry : official publication of the Biological Stain Commission

Romanowsky-Giemsa as a counterstain for immunohistochemistry: optimizing a traditional reagent.

"MA5-12135 was used in immunohistochemistry to develop a protocol for the counterstaining of immunohistochemical sections using Romanowsky-Giemsa"

Authors: Stefanovi D,Stefanovi M,Nikin Z

Year
2013

Species
Human

APMIS : acta pathologica, microbiologica, et immunologica Scandinavica

Malignant transformation of adenomyoepithelioma of the breast by a monophasic population: a report of two cases and review of literature.

"MA5-12135 was used in immunohistochemistry to report on two cases of malignant transformation of adenomyoepithelioma of the breast by a monophasic population"

Authors: Marian C,Boila A,Soanca D,Malau M,Podeanu DM,Resetkova E,Stolnicu S

Year
2013

Species
Human

Dilution
1:50

[View more IHC references on thermofisher.com](#)

Immunohistochemistry (Paraffin) (1)

Human pathology

Reevaluation of MAML2 fusion-negative mucoepidermoid carcinoma: a subgroup being actually hyalinizing clear cell carcinoma of the salivary gland with EWSR1 translocation.

"MA512135 was used in immunohistochemistry - paraffin section to use MAML2 staining to distinguish cases of hyalinizing clear cell carcinoma from mucoepidermoid carcinoma"

Authors: Hsieh MS,Wang H,Lee YH,Ko JY,Chang YL

Year
2017

Species
Human

Dilution
1:100

Immunohistochemistry (PFA fixed) (1)

Journal of virology

Mechanisms of Endogenous HIV-1 Reactivation by Endocervical Epithelial Cells.

"MA5-12135 was used in Immunohistochemistry (PFA fixed) to find that the columnar epithelial cells lining the endocervix, the lower part of the uterus, are particularly effective in reactivating HIV-1 from infected T cells."

Authors: Gornalusse GG,Valdez R,Fenkart G,Vojtech L,Fleming LM,Pandey U,Hughes SM,Levy CN,Dela Cruz EJ, Calienes FL,Kirby AC,Fialkow MF,Lentz GM,Wagoner J,Jing L,Koelle DM,Polyak SJ,Fredricks DN,McElrath MJ,Wald A, Hladik F

Year
2020

Species
Human

Dilution
1:500

More applications with references on thermofisher.com

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