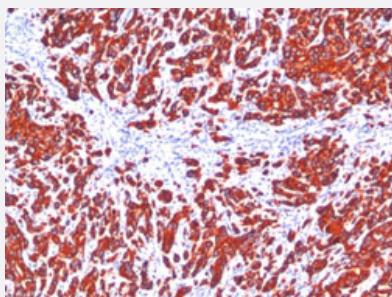


Pan Cytokeratin monoclonal antibody, clone SPM115 + SPM116

Catalog # MAB15227 Size 100 ug

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human breast carcinoma with Pan Cytokeratin monoclonal antibody, clone SPM115 + SPM116 (Cat # MAB15227).

Specification

Product Description	Mouse monoclonal antibody raised against native human Pan Cytokeratin.
Immunogen	Human epidermal keratin.
Host	Mouse
Theoretical MW (kDa)	40-67
Reactivity	Human
Form	Liquid
Purification	Protein A/G purification
Isotype	IgG
Recommend Usage	Flow Cytometry (0.5-1 ug/10 ⁶ cells in 0.1 mL) Immunofluorescence (1-2 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (0.25-0.5 ug/mL) Western Blotting (0.5-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In 10 mM PBS.

Storage Instruction

Store at -20 to -80°C.
Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot
- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human breast carcinoma with Pan Cytokeratin monoclonal antibody, clone SPM115 + SPM116 (Cat # MAB15227).

- Immunofluorescence
- Flow Cytometry

Gene Info — KRT1

Entrez GeneID	3848
Protein Accession#	P04264;P12035;P19013;P13647;P02538;P04259;P48668;P05787;P13645;P02533;P19012;P08779;P08727
Gene Name	KRT1
Gene Alias	CK1, EHK1, K1, KRT1A
Gene Description	keratin 1
Omim ID	113800 139350 146590 148700 600962 607602 607654
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is specifically expressed in the spinous and granular layers of the epidermis with family member KRT10 and mutations in these genes have been associated with bullous congenital ichthyosiform erythroderma. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by RefSeq]
Other Designations	cytokeratin 1 epidermolytic hyperkeratosis 1 hair alpha protein keratin, type II cytoskeletal 1

Gene Info — KRT3

Entrez GeneID	3850
Protein Accession#	P04264;P12035;P19013;P13647;P02538;P04259;P48668;P05787;P13645;P02533;P19012;P08779;P08727
Gene Name	KRT3
Gene Alias	CK3, FLJ95909, K3
Gene Description	keratin 3
Omim ID	122100 148043
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is specifically expressed in the corneal epithelium with family member KRT12 and mutations in these genes have been associated with Meesmann's Corneal Dystrophy. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by RefSeq]
Other Designations	65 kDa cytokeratin cytokeratin 3 keratin, type II cytoskeletal 3

Gene Info — KRT4

Entrez GeneID	3851
Protein Accession#	P04264;P12035;P19013;P13647;P02538;P04259;P48668;P05787;P13645;P02533;P19012;P08779;P08727
Gene Name	KRT4
Gene Alias	CK4, CYK4, FLJ31692, K4
Gene Description	keratin 4
Omim ID	123940 193900
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is specifically expressed in differentiated layers of the mucosal and esophageal epithelia with family member KRT13. Mutations in these genes have been associated with White Sponge Nevus, characterized by oral, esophageal, and anal leukoplakia. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by RefSeq]

Other Designations

cytokeratin 4|keratin, type II cytoskeletal 4

Gene Info — KRT5

Entrez GeneID

[3852](#)

Protein Accession#

[P04264;P12035;P19013;P13647;P02538;P04259;P48668;P05787;P13645;P02533;P19012;P08779;P08727](#)

Gene Name

KRT5

Gene Alias

CK5, DDD, EBS2, K5, KRT5A

Gene Description

keratin 5

Omim ID

[131800](#) [131960](#) [148040](#) [179850](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is specifically expressed in the basal layer of the epidermis with family member KRT14. Mutations in these genes have been associated with a complex of diseases termed epidermolysis bullosa simplex. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by RefSeq]

Other Designations

58 kda cytokeratin|epidermolysis bullosa simplex 2 Dowling-Meara/Kobner/Weber-Cockayne types|keratin 5 (epidermolysis bullosa simplex, Dowling-Meara/Kobner/Weber-Cockayne types)|keratin, type II cytoskeletal 5

Gene Info — KRT6A

Entrez GeneID

[3853](#)

Protein Accession#

[P04264;P12035;P19013;P13647;P02538;P04259;P48668;P05787;P13645;P02533;P19012;P08779;P08727](#)

Gene Name

KRT6A

Gene Alias	CK6A, CK6C, CK6D, K6A, K6C, K6D, KRT6C, KRT6D
Gene Description	keratin 6A
Omim ID	148041 167200
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. As many as six of this type II cytokeratin (KRT6) have been identified; the multiplicity of the genes is attributed to successive gene duplication events. The genes are expressed with family members KRT16 and/or KRT17 in the filiform papillae of the tongue, the stratified epithelial lining of oral mucosa and esophagus, the outer root sheath of hair follicles, and the glandular epithelia. This KRT6 gene in particular encodes the most abundant isoform. Mutations in these genes have been associated with pachyonychia congenita. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by RefSeq]
Other Designations	56 cytoskeletal type II keratin K6D keratin cytokeratin 6A cytokeratin 6C cytokeratin 6D keratin 6C keratin, epidermal type II, K6A keratin, epidermal type II, K6C keratin, type II cytoskeletal 6D type II keratin isoform K6c

Gene Info — KRT6B

Entrez GeneID	3854
Protein Accession#	P04264 ; P12035 ; P19013 ; P13647 ; P02538 ; P04259 ; P48668 ; P05787 ; P13645 ; P02533 ; P19012 ; P08779 ; P08727
Gene Name	KRT6B
Gene Alias	CK6B, K6B, KRTL1, PC2
Gene Description	keratin 6B
Omim ID	148042 167210
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. As many as six of this type II cytokeratin (KRT6) have been identified; the multiplicity of the genes is attributed to successive gene duplication events. The genes are expressed with family members KRT16 and/or KRT17 in the filiform papillae of the tongue, the stratified epithelial lining of oral mucosa and esophagus, the outer root sheath of hair follicles, and the glandular epithelia. Mutations in these genes have been associated with pachyonychia congenita. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by RefSeq]

Other Designations

cytokeratin 6B|keratin, epidermal, type II, K6B|keratin, type II cytoskeletal 6B|keratin-like 1 (a type I keratin sequence)

Gene Info — KRT8

Entrez GeneID

[3856](#)

Protein Accession#

[P04264;P12035;P19013;P13647;P02538;P04259;P48668;P05787;P13645;P02533;P19012;P08779;P08727](#)

Gene Name

KRT8

Gene Alias

CARD2, CK8, CYK8, K2C8, K8, KO

Gene Description

keratin 8

Omim ID

[148060 215600](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

This gene is a member of the type II keratin family clustered on the long arm of chromosome 12. Type I and type II keratins heteropolymerize to form intermediate-sized filaments in the cytoplasm of epithelial cells. The product of this gene typically dimerizes with keratin 18 to form an intermediate filament in simple single-layered epithelial cells. This protein plays a role in maintaining cellular structural integrity and also functions in signal transduction and cellular differentiation. Mutations in this gene cause cryptogenic cirrhosis. [provided by RefSeq]

Other Designations

cytokeratin 8|keratin, type II cytoskeletal 8

Gene Info — KRT10

Entrez GeneID

[3858](#)

Protein Accession#

[P04264;P12035;P19013;P13647;P02538;P04259;P48668;P05787;P13645;P02533;P19012;P08779;P08727](#)

Gene Name

KRT10

Gene Alias

CK10, K10, KPP

Gene Description

keratin 10

Omim ID

[113800 148080 600648 607602](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

This gene encodes a member of the type I (acidic) cytokeratin family, which belongs to the superfamily of intermediate filament (IF) proteins. Keratins are heteropolymeric structural proteins which form the intermediate filament. These filaments, along with actin microfilaments and microtubules, compose the cytoskeleton of epithelial cells. Mutations in this gene are associated with epidermolytic hyperkeratosis. This gene is located within a cluster of keratin family members on chromosome 17q21. [provided by RefSeq]

Other Designations

cytokeratin 10

Gene Info — KRT6C

Entrez GeneID

[286887](#)

Protein Accession#

[P04264](#); [P12035](#); [P19013](#); [P13647](#); [P02538](#); [P04259](#); [P48668](#); [P05787](#); [P13645](#); [P02533](#); [P19012](#); [P08779](#); [P08727](#)

Gene Name

KRT6C

Gene Alias

K6E, KRT6E, MGC102925, MGC163455, MGC163457

Gene Description

keratin 6C

Gene Ontology

[Hyperlink](#)

Gene Summary

Keratins are intermediate filament proteins responsible for the structural integrity of epithelial cells and are subdivided into epithelial keratins and hair keratins. The type II keratins are clustered in a region of chromosome 12q13. [provided by RefSeq]

Other Designations

keratin 6E

Publication Reference

- [Immunolocalization of keratin polypeptides in human epidermis using monoclonal antibodies.](#)

J Woodcock-Mitchell, R Eichner, W G Nelson, T T Sun.
The Journal of Cell Biology 1982 Nov; 95(2 Pt 1):580.

- [Correlation of specific keratins with different types of epithelial differentiation: monoclonal antibody studies.](#)

S C Tseng, M J Jarvinen, W G Nelson, J W Huang, J Woodcock-Mitchell, T T Sun.
Cell 1982 Sep; 30(2):361.

Disease

- [Alzheimer disease](#)
- [Brain Ischemia](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cerebral Amyloid Angiopathy](#)
- [Chronic Disease](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Disease Progression](#)
- [Drug-Induced Liver Injury](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Hepatitis C](#)
- [Inflammatory Bowel Diseases](#)
- [Liver Cirrhosis](#)
- [Liver Failure](#)
- [Melanoma](#)
- [Myocardial Infarction](#)
- [Neuroblastoma](#)
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