

Basic Cytokeratin monoclonal antibody, clone SPM116

Catalog # MAB12077 Size 100 ug

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human skin with Basic Cytokeratin monoclonal antibody, clone SPM116 (Cat# MAB12077).

Specification	
Product Description	Mouse monoclonalantibody raised against Basic Cytokeratin.
Immunogen	Solubilized keratin extract from human stratum corneum.
Host	Mouse
Theoretical MW (kDa)	52-67
Reactivity	Human, Mouse, Rabbit, Rat
Specificity	This monoclonal antibody recognizes KRT1 (67kDa), KRT3 (64kDa), KRT4 (59kDa), KRT5 (58kDa), KRT6 (56kDa), and KRT8 (52kDa).
Form	Liquid
Purification	Protein A/G purification
Isotype	lgG1, kappa
Recommend Usage	Immunohistochemistry (0.5-1 ug/mL) Western Blot (0.5-1 ug/mL) The optimal working dilution should be determined by the end user.



Product Information

Storage Buffer	In PBS (0.05% BSA, 0.05% sodium azide).
Storage Instruction	Store at 4°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human skin with Basic Cytokeratin monoclonal antibody, clone SPM116 (Cat# MAB12077).

Gene Info — KRT1	
Entrez GenelD	<u>3848</u>
Gene Name	KRT1
Gene Alias	CK1, EHK1, K1, KRT1A
Gene Description	keratin 1
Omim ID	<u>113800</u> <u>139350</u> <u>146590</u> <u>148700</u> <u>600962</u> <u>607602</u> <u>607654</u>
Gene Ontology	<u>Hyperlink</u>
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 coex pressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is s pecifically expressed in the spinous and granular layers of the epidermis with family member KRT 10 and mutations in these genes have been associated with bullous congenital ichthyosiform eryt hroderma. 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	<u>3850</u>



Product Information

Gene Name	KRT3
Gene Alias	CK3, FLJ95909, K3
Gene Description	keratin 3
Omim ID	<u>122100 148043</u>
Gene Ontology	<u>Hyperlink</u>
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 coex pressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is s pecifically 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 clu stered 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 GenelD	3851
Gene Name	KRT4
Gene Alias	CK4, CYK4, FLJ31692, K4
Gene Description	keratin 4
Omim ID	<u>123940</u> <u>193900</u>
Gene Ontology	<u>Hyperlink</u>
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 coex pressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is s pecifically 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, char acterized by oral, esophageal, and anal leukoplakia. The type II cytokeratins are clustered in a reg ion of chromosome 12q12-q13. [provided by RefSeq
Other Designations	cytokeratin 4 keratin, type II cytoskeletal 4

Gene Info — KRT5	
Entrez GeneID	<u>3852</u>



Product Information

Gene Name	KRT5
Gene Alias	CK5, DDD, EBS2, K5, KRT5A
Gene Description	keratin 5
Omim ID	<u>131800</u> <u>131960</u> <u>148040</u> <u>179850</u>
Gene Ontology	<u>Hyperlink</u>
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 coex pressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is s pecifically expressed in the basal layer of the epidermis with family member KRT14. Mutations in t hese genes have been associated with a complex of diseases termed epidermolysis bullosa sim plex. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by R efSeq
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 — KRT6	6A
Entrez GenelD	<u>3853</u>
Gene Name	KRT6A
Gene Alias	CK6A, CK6C, CK6D, K6A, K6C, K6D, KRT6C, KRT6D
Gene Description	keratin 6A
Omim ID	<u>148041 167200</u>
Gene Ontology	<u>Hyperlink</u>
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 coex pressed 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 — KRT8	
Entrez GenelD	<u>3856</u>
Gene Name	KRT8
Gene Alias	CARD2, CK8, CYK8, K2C8, K8, KO
Gene Description	keratin 8
Omim ID	<u>148060</u> <u>215600</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene is a member of the type II keratin family clustered on the long arm of chromosome 12. T ype 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 str uctural integrity and also functions in signal transduction and cellular differentiation. Mutations in the is gene cause cryptogenic cirrhosis. [provided by RefSeq
Other Designations	cytokeratin 8 keratin, type II cytoskeletal 8

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
- Pancreatitis
- Skin Neoplasms
- Stroke