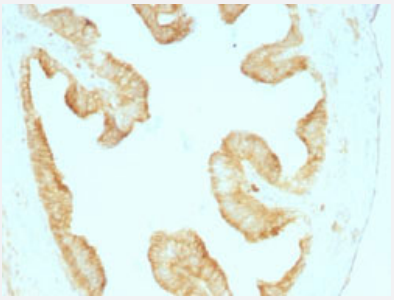
Cytokeratin monoclonal antibody, clone KRT/457

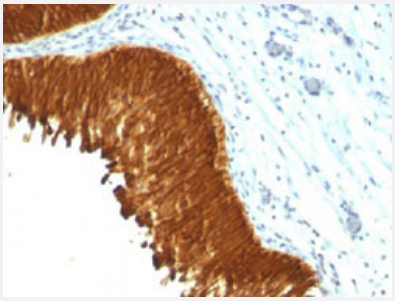
Catalog # MAB14657 Size 100 ug

Applications



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

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of rat ovary with Cytokeratin monoclonal antibody, clone KRT/457 (Cat # MAB14657).



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

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human bladder carcinoma with Cytokeratin monoclonal antibody, clone KRT/457 (Cat # MAB14657).

Specification

Product Description	Mouse monoclonal antibody raised against native human Cytokeratin.
Immunogen	Keratin-enriched preparation from cultured human epithelial cells.
Host	Mouse
Reactivity	Human, Rat
Specificity	This antibody recognizes Type I and Type II cytokeratins, including CK4, CK5, CK6, CK8, CK10, CK 13, and CK18.
Form	Liquid

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Purification	Protein G purification
Isotype	IgG1
Recommend Usage	Flow Cytometry (0.5-1 ug/million cells in 0.1 mL) Immunofluorescence (0.5-1 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (0.5-1 ug/mL) Western Blot (0.5-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% BSA, 0.05% sodium azide).
Storage Instruction	Store at 4°C.
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 rat ovary with Cytokeratin monoclonal antibody, clone KRT/457 (Cat # MAB14657).
- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human bladder carcinoma with Cytokeratin monoclonal antibody, clone KRT/457 (Cat # MAB14657).
- Immunofluorescence
- Flow Cytometry

Gene Info — KRT4

Entrez GeneID	3851
Protein Accession#	P02538; P04259; P13647; P19013; P48668; P05787; P13645; P13646; P05783
Gene Name	KRT4
Gene Alias	CK4, CYK4, FLJ31692, K4
Gene Description	keratin 4

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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 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	3852
Protein Accession#	P02538; P04259; P13647; P19013; P48668; P05787; P13645; P13646; P05783
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 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 typ es|keratin 5 (epidermolysis bullosa simplex, Dowling-Meara/Kobner/Weber-Cockayne types)|ker atin, type II cytoskeletal 5

Gene Info — KRT6A

Entrez GeneID	3853
Protein Accession#	P02538; P04259; P13647; P19013; P48668; P05787; P13645; P13646; P05783

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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 coex pressed during differentiation of simple and stratified epithelial tissues. As many as six of this typ e II cytokeratin (KRT6) have been identified; the multiplicity of the genes is attributed to successiv e gene duplication events. The genes are expressed with family members KRT16 and/or KRT17 i n the filiform papillae of the tongue, the stratified epithelial lining of oral mucosa and esophagus, t he outer root sheath of hair follicles, and the glandular epithelia. This KRT6 gene in particular enco des the most abundant isoform. Mutations in these genes have been associated with pachyonychi a congenita. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provid ed 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#	P02538; P04259; P13647; P19013; P48668; P05787; P13645; P13646; P05783
Gene Name	KRT6B
Gene Alias	CK6B, K6B, KRTL1, PC2
Gene Description	keratin 6B
Omim ID	148042 167210
Gene Ontology	Hyperlink

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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 typ e II cytokeratin (KRT6) have been identified; the multiplicity of the genes is attributed to successiv e gene duplication events. The genes are expressed with family members KRT16 and/or KRT17 i n the filiform papillae of the tongue, the stratified epithelial lining of oral mucosa and esophagus, t he outer root sheath of hair follicles, and the glandular epithelia. Mutations in these genes have be en associated with pachyonychia congenita. The type II cytokeratins are clustered in a region of c hromosome 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 I keratin sequence)

Gene Info — KRT8

Entrez GeneID	3856
Protein Accession#	P02538; P04259; P13647; P19013; P48668; P05787; P13645; P13646; P05783
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. 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 th is gene cause cryptogenic cirrhosis. [provided by RefSeq
Other Designations	cytokeratin 8|keratin, type II cytoskeletal 8

Gene Info — KRT10

Entrez GeneID	3858
Protein Accession#	P02538; P04259; P13647; P19013; P48668; P05787; P13645; P13646; P05783
Gene Name	KRT10
Gene Alias	CK10, K10, KPP

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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 superf amily 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 epidermol ytic hyperkeratosis. This gene is located within a cluster of keratin family members on chromosom e 17q21. [provided by RefSeq
Other Designations	cytokeratin 10

Gene Info — KRT13

Entrez GeneID	3860
Protein Accession#	P02538; P04259; P13647; P19013; P48668; P05787; P13645; P13646; P05783
Gene Name	KRT13
Gene Alias	CK13, K13, MGC161462, MGC3781
Gene Description	keratin 13
Omim ID	148065 193900
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the keratin gene family. The keratins are interm ediate filament proteins responsible for the structural integrity of epithelial cells and are subdivide d into cytokeratins and hair keratins. Most of the type I cytokeratins consist of acidic proteins whic h are arranged in pairs of heterotypic keratin chains. This type I cytokeratin is paired with keratin 4 and expressed in the suprabasal layers of non-cornified stratified epithelia. Mutations in this gene and keratin 4 have been associated with the autosomal dominant disorder White Sponge Nevus. The type I cytokeratins are clustered in a region of chromosome 17q21.2. Alternative splicing of th is gene results in multiple transcript variants; however, not all variants have been described. [provi ded by RefSeq
Other Designations	cytokeratin 13|keratin, type I cytoskeletal 13

Gene Info — KRT18

Entrez GeneID	3875

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Protein Accession#	P02538; P04259; P13647; P19013; P48668; P05787; P13645; P13646; P05783
Gene Name	KRT18
Gene Alias	CYK18, K18
Gene Description	keratin 18
Omim ID	148070 215600
Gene Ontology	Hyperlink
Gene Summary	KRT18 encodes the type I intermediate filament chain keratin 18. Keratin 18, together with its filament partner keratin 8, are perhaps the most commonly found members of the intermediate filament gene family. They are expressed in single layer epithelial tissues of the body. Mutations in this gene have been linked to cryptogenic cirrhosis. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq
Other Designations	cell proliferation-inducing protein 46|cytokeratin 18

Gene Info — KRT6C

Entrez GeneID	286887
Protein Accession#	P02538; P04259; P13647; P19013; P48668; P05787; P13645; P13646; P05783
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

- A series of 14 new monoclonal antibodies to keratins: characterization and value in diagnostic histopathology.

  Bártek J, Vojtěsek B, Stasková Z, Bártková J, Kerekés Z, Rejthar A, Kovarík J.

  The Journal of Pathology 1991 Jul; 164(3):215.

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- Heterogeneity in the immunolocalization of cytokeratin specific monoclonal antibodies in the rat eye: evaluation of unusual epithelial tissue entities.

  Kasper M.

  Histochemistry 1991 Jan; 95(6):613.

  Application: IF, IHC-Fr, Rat, Brains, Eyes

Pathway

- Pathogenic Escherichia coli infection - EHEC

Disease

- Alzheimer disease
- Brain Ischemia
- Carcinoma
- Cardiovascular Diseases
- Cerebral Amyloid Angiopathy
- Chronic Disease
- Cleft Lip
- Cleft Palate
- Coronary Artery Disease
- Coronary Disease
- Disease Progression
- Drug-Induced Liver Injury
- Drug-Induced Liver Injury
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Hepatitis C

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- Inflammatory Bowel Diseases
- Liver Cirrhosis
- Liver Cirrhosis
- Liver Failure
- Liver Failure
- Melanoma
- Myocardial Infarction
- Neuroblastoma
- Pancreatitis
- Skin Neoplasms
- Stroke

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