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Cytokeratin 6 (KRT6) (Hyperproliferation-Related Keratin) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM269]
Catalog # AH10548

Product Information

Application	IF, FC, IHC-P
Primary Accession	P02538
Other Accession	3853-KRT6A, 3854-KRT6B, 286887-KRT6C, 700779, P04259, P48668
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2a, kappa
Clone Names	SPM269
Calculated MW	60045

Additional Information

Gene ID	3853
Other Names	Keratin, type II cytoskeletal 6A, Cytokeratin-6A, CK-6A, Cytokeratin-6D, CK-6D, Keratin-6A, K6A, Type-II keratin Kb6, Hom s 5, KRT6A, K6A, KRT6D
Application Note	IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Cytokeratin 6 (KRT6) (Hyperproliferation-Related Keratin) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KRT6A (HGNC:6443)
Synonyms	K6A, KRT6D
Function	Structural component of intermediate filaments in epithelial keratinocytes. Forms heteropolymers with the type I keratins KRT16 and KRT17, assembling into keratin intermediate filament networks that contribute to the structural integrity and stress resilience of stratified epithelia, particularly in epidermis, nail bed and oral mucosa (PubMed:11886499, PubMed:17719747,

PubMed:7545493). Rapidly induced in wound-edge keratinocytes and participates in cytoskeletal reorganization during re-epithelialization (By similarity). Negatively regulates collective keratinocyte migration by stabilizing non-muscle myosin MYH9 and desmoplakin, thereby altering cell-cell and cell-matrix adhesion and reducing the speed and directionality of epithelial sheet movement during wound repair (By similarity). Also limits epithelial migration by inhibiting SRC activity during wound repair (By similarity). Required for normal plantar and nail unit integrity (PubMed:11886499, PubMed:17719747, PubMed:7545493).

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:P50446}.

Tissue Location Expressed in the corneal epithelium (at protein level).

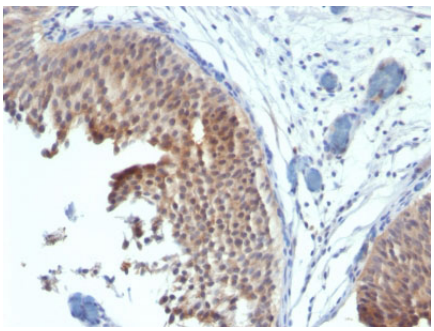
Background

This MAb recognizes a protein of 56kDa, identified as cytokeratin 6 (CK6). In humans, multiple isoforms of Cytokeratin 6 (6A-6F), encoded by several highly homologous genes, have distinct tissue expression patterns, and Cytokeratin 6A is the dominant form in epithelial tissue. The gene encoding human Cytokeratin 6A maps to chromosome 12q13, and mutations in this gene are linked to several inheritable hair and skin pathologies. Keratins 6 and 16 are expressed in keratinocytes, which are undergoing rapid turnover in the suprabasal region (also known as hyper-proliferation-related keratins). Keratin 6 is found in hair follicles, suprabasal cells of a variety of internal stratified epithelia, in epidermis, in both normal and hyper-proliferative situations. Epidermal injury results in activation of keratinocytes, which express CK6 and CK16. CK6 is strongly expressed in about 75% of head and neck squamous cell carcinomas. Expression of CK6 is particularly associated with differentiation.

References

Wetzels RH, et. al. American Journal of Pathology, 1991, 138(3):751-63

Images



Formalin-fixed, paraffin-embedded human Bladder Carcinoma stained with Cytokeratin 6 Monoclonal Antibody (SPM269)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.