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KRT19 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1576a

Product Information

Application	WB, IHC, E
Primary Accession	P08727
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1H6
Isotype	IgG1
Calculated MW	44106
Description	The protein encoded by this gene is a member of the keratin family. The keratins are intermediate filament proteins responsible for the structural integrity of epithelial cells and are subdivided into cytokeratins and hair keratins. The type I cytokeratins consist of acidic proteins which are arranged in pairs of heterotypic keratin chains. Unlike its related family members, this smallest known acidic cytokeratin is not paired with a basic cytokeratin in epithelial cells. It is specifically expressed in the periderm, the transiently superficial layer that envelopes the developing epidermis. The type I cytokeratins are clustered in a region of chromosome 17q12-q21.
Immunogen	Purified recombinant fragment of human KRT19 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	3880
Other Names	Keratin, type I cytoskeletal 19, Cytokeratin-19, CK-19, Keratin-19, K19, KRT19
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KRT19 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KRT19 (HGNC:6436)

Function	Structural component of intermediate filaments in epithelial cells. Forms intermediate filaments by heterodimerizing with the type II keratin KRT8, providing mechanical integrity to epithelial cells (PubMed:16000376). Integrates into the intermediate filament network of skeletal muscle fibers alongside desmin and KRT18, contributing to force transmission (By similarity). Specifically interacts with the actin-binding domain of dystrophin, helping to link the contractile apparatus to dystrophin at the costameres of striated muscle (PubMed:16000376).
Tissue Location	Expressed in a defined zone of basal keratinocytes in the deep outer root sheath of hair follicles. Also observed in sweat gland and mammary gland ductal and secretory cells, bile ducts, gastrointestinal tract, bladder urothelium, oral epithelia, esophagus, ectocervical epithelium (at protein level). Expressed in epidermal basal cells, in nipple epidermis and a defined region of the hair follicle. Also seen in a subset of vascular wall cells in both the veins and artery of human umbilical cord, and in umbilical cord vascular smooth muscle. Observed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma in structures that contain dystrophin and spectrin.

References

1. Exp Cell Res. 2009 Jul 1;315(11):1964-74. 2. Acta Cytol. 2008 Sep-Oct;52(5):541-8.

Images

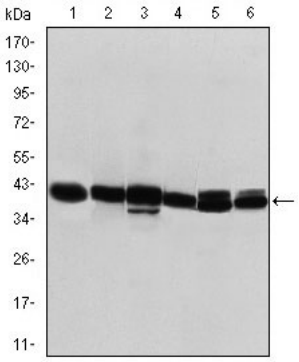


Figure 1: Western blot analysis using KRT19 mouse mAb against T47D (1), MCF-7 (2), SKBR-3 (3), HepG2 (4), Caco-2 (5) and SW620 (6) cell lysate.

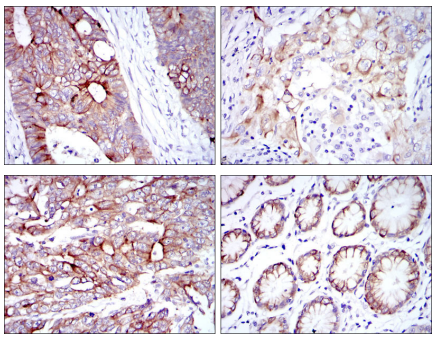


Figure 2: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues (left) and lung cancer tissues (right) using KRT19 mouse mAb with DAB staining.

Figure 3: Immunohistochemical analysis of paraffin-embedded stomach cancer tissues (left) and stomach tissues (right) using KRT19 mouse mAb with DAB staining.

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